

To the Accreditation Council of the
Eurasian Centre for Accreditation and
Quality Assurance
in Higher Education and Health Care
June 9, 2023

**REPORT
OF THE EXTERNAL EXPERT COMMISSION
BASED ON THE RESULTS OF THE EVALUATION OF THE EDUCATIONAL
PROGRAM
7 R01102 "ANESTHESIOLOGY AND RESUSCITATION FOR ADULTS AND
CHILDREN" KARAGANDA MEDICAL UNIVERSITY
FOR COMPLIANCE WITH THE STANDARDS OF ACCREDITATION OF
POSTGRADUATE EDUCATION PROGRAMS (RESIDENCY SPECIALTIES)
IN THE MEDICAL EDUCATIONAL ORGANIZATIONS**

External expert assessment period: May 24-26, 2023

Karaganda, 2023
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LIST OF DESIGNATIONS AND ABBREVIATIONS

Abbreviation	Designation
AC	Academic Committee
AP	Academic Policies
EEC	External Expert Committee
HEI	Higher Education Institution
SCES	State Comprehensive Education Standard
DAA	Department of Academic Affairs
DET	Distance Education Technologies
DIID	Department of Informatisation and Infrastructure Development
HRMD	Human Resources Management Department
UHEMS	Unified Higher Education Management System
ECAQA	Eurasian Centre for Accreditation and Quality Assurance in Higher Education and Health Care
FAC	Final Attestation Commission
FA	Final Attestation
IEP	Individual Education Plan
IHIS	Integrated Healthcare Information System
CED	Catalogue of Elective Disciplines
MH	Ministry of Health
MES	Ministry of Education and Science (now Ministry of Science and Higher Education)
KMU NJSC	Karaganda Medical University Non-Profit Joint Stock Company
NCIE	National Centre for Independent Examinations
OCCH	Oblast Children's Clinical Hospital
OCH	Oblast Clinical Hospital
EP	Education Program
APS	Assessment of Practical Skills
TRA	Tolerance Rating Assessment
OSCE	Objective Structured Clinical Examination
PS	Principal Subject
PHC	Primary Health Care
HETP	Higher-Education Teaching Personnel
RK	Республика Казахстан/ Republic of Kazakhstan
WC	Working Curriculum
SSS	Student Support Services
IWR	Independent Work of Residents
IWRT	Independent work of residents with teachers
EPMS	Employee Performance Management System
MC	Model curriculum
KOHD	Karaganda Oblast Health Department
TM	Teaching Materials
ACM REB	Academic Methodological Association of the Republican Education Board
CSET	Centre for Simulation and Educational Technology
SRPD	School of Residency and Professional Development

1. Members of the external expert committee

In accordance with the ECA order No. 15 of 11.05.2023, an External Expert Commission

(hereinafter referred to as EEC) was formed to conduct an external evaluation of the educational programme of the residency in the specialty 7R01102 "ANESTHESIOLOGY AND RESUSCITATION FOR ADULTS AND CHILDREN" in the period of 24-26 May 2023 in the following membership:

No	Status as a member of the EEC	Full name	Academic degree/title, position, place of work/place of study, course, speciality
1	Chairman	Khatimya Ilyasovna Kudabaeva	Associate Professor, Candidate of Medical Sciences, Professor of the Department of Internal Diseases №1 Marat Ospanov Western Kazakhstan Medical University NJSC (non-public joint stock company)
2	Foreign expert	Sergey Aleksandrovich Ryzhkin	Doctor of Medical Sciences, Head of the Department of Radiotherapy and Radiology named after Academician A.S. Pavlov, Head of the Department of Additional Professional Education of the Russian Medical Academy of Continuous Professional Development (Moscow), Scientific Secretary of the Department of Medical and Biological Sciences of the Academy of Sciences of the Republic of Tatarstan, accredited expert of the Federal Service for Supervision of Education and Science (Rosobrnadzor).
3	Academic expert	Shushanik Gevorgovna Afrikyan	PhD in Pharmacy/Candidate of Pharmaceutical Sciences, Associate Professor of the Department of Pharmacy, Head of the Computer Based Examinations Organisation Department, Yerevan State Medical University after M. Geratsi, Republic of Armenia.
4	Academic expert	Saltanat Nurgozhayevna Urazova	Doctor of Medical Sciences, Head of the Department of Family Medicine No. 3. Astana Medical University NJSC
5	Academic expert	Darya Muratovna Shabdarbaeva	Doctor of Medical Sciences, Professor, pathologist of the highest category, medical examiner of the highest category, head of the department of pathological anatomy and forensic medicine named after Professor Y.V. Pruglo, Semey Medical University NJSC
6	Academic expert	Raygul Mukhanbetovna Ramazanova	Doctor of Medical Sciences, Professor of the Department of Internal Medicine Kazakh National Medical University named after S.D. Asfendiyarov NJSC
7	Academic expert	Akmaral Kanashevna Zhumalina	Doctor of Medical Sciences, Professor, Head of the department of paediatric diseases with neonatology West Kazakhstan State Medical University

			named after Marat Ospanov NJSC
8	Academic expert	Raihan Esenzhanovna Tuleutayeva	Candidate of Medical Sciences, Head of the Department of Pharmacology and Evidence-based Medicine of Medical University NJSC
9	Academic expert	Zaure Alpanovna Baigozhina	PhD in Medical Sciences, Dean of the School of Nursing Astana Medical University NJSC, Member of the Association for Medical Education in Europe (AMEE).
10	Academic expert	Sholpan Khamzaevna Ramazanova	Candidate of Medical Sciences, Acting Associate Professor at the Department of Clinical Disciplines, Al-Farabi Kazakh National University.
11	Academic expert	Bibikhan Abdaliyevna Yeralieva	Candidate of Medical Sciences, Assistant of the Department of Clinical Pharmacology Kazakh National Medical University named after S.D. Asfendiyarov NJSC
12	Academic expert	Gulnara Akhmetkazyevna Isposunova	doctor - urologist of the highest qualification category, assistant of the Urology Department Kazakh National Medical University named after S.D. Asfendiyarov NJSC
13	Academic expert	Asem Kalelovna Dosanova	PhD, Associate Professor, Department of Paediatric Surgery Astana Medical University NJSC
14	Academic expert	Asel Baidauletovna Doshakanova	Candidate of Medical Sciences, Head of the Postgraduate Education Department of the Kazakh Order "Badge of Honour" Research Institute of Eye Diseases LLP
15	Employers' Representative	Bayan Lashinovna Daniyarova	Deputy Director for Strategic Development of the Regional Clinical Hospital, Karaganda Oblast Health Department
16	Expert - representative of doctoral students	Aknur Daurenkyzy Orazbay	Doctoral student of the first year of study in the Biology speciality E.A. Buketov Karaganda University NJSC
17	Residents' representative	Aydana Kurak	Resident of the first year of training on speciality "Adult and Pediatric Endocrinology" of the Medical University of Astana NJSC

The ECA observer - Makpal Aldibekovna Umarova, Head of Accreditation and Monitoring Department.

The work of the EEC was carried out in accordance with the Regulation on the EEC (Order of the ECA Director General No. 4 of 13 February 2017).

The report of the EEC contains the evaluation of the educational programme **7R01102 "ANESTHESIOLOGY AND RESUSCITATION FOR ADULTS AND CHILDREN"** for compliance with the Standards for Accreditation of Postgraduate Education Programmes (Residency Specialty) of Medical Education Organisations and Conclusions (hereinafter - Accreditation Standards), recommendations of the EEC on further improvement of approaches and conditions for

implementation of the above educational programme and recommendations for the ECA Accreditation Council.

2. General part of the final report

2.1 Presentation of the educational program of the residency in the specialty 7R01102 "Anesthesiology and intensive care for adults and children"

Name of the organization, legal form of ownership, BIN	Karaganda Medical University Non-profit Joint-Stock Company
Management body	Ministry of Health of the Republic of Kazakhstan
Full name of the first head	Turmukhambetova Anar Akyzbekovna
Date of creation	January 20, 1950
Location and contact details	Republic of Kazakhstan, Karaganda region, 100008, Karaganda, Gogol str., 40
State license for educational activities in residency (date, number)	KZ32LAA00016018 dated May 5, 2019
Information about branches, subsidiaries (if available)	-
The year of the start of the accredited educational program (EP)	2018
Duration of training	3 years
The total number of graduates since the beginning of the implementation of the EP	76
The number of residents on the EP since the beginning of the current academic year	111, of which 23 are residents of the 1st year, 40 of the second year, 48 of the third year
Full-time teachers/ Part-timers involved in the implementation of the EP, including % of the settlement	The total number of teachers is 8, including full-time teachers - 8, part-time teachers - 0. Academic degree holders rate, % - 50% Categorization, % - 100%.
Website Instagram Facebook with active pages	https://qmu.edu.kz/ru

Since 2019 KМУ NJPSC received the status of a research university (Resolution of the Ministry of Health of the Republic of Kazakhstan dated June 27, 2019 No. 453). The quality of education and scientific research is ensured by a high level of infrastructure - 7 academic buildings with classrooms equipped with interactive equipment, a library and publishing center with reading rooms and an electronic library hall, a central research center with high-tech simulators and mannequins, a research center and a laboratory for collective use, a research sanitary and hygienic laboratory, 6 dormitories, 57 clinical bases of the university and 9 clinical departments, the Clinic of the Medical University of KМУ NJPSC, the Clinic of Professional Health, dental clinic, Student Service Center, student sports and recreation camps.

In the field of medical education, science and practice, the university's partners are medical universities and research centers of Kazakhstan, Russia, Belarus, Georgia, Tajikistan, Uzbekistan, Sweden, France, Italy, Japan, etc.: University of London St. George (UK), Lund University (Sweden), University of Milan (Italy), University of Poitiers (France), University of Vilnius (Lithuania), Modern

Institute of Hospital Management (India), Medical University of Plovdiv (Bulgaria), Aristotle University of Thessaloniki (Greece), Medical University of Lublin (Poland), Lahti University of Applied Sciences (Finland), International Medical University (Malaysia), JAMK University of Applied Sciences (Finland), University of Zagreb School of Medicine (Croatia), Ataturk University (Turkey), Shimane University (Japan), University of Porto (Portugal), Israeli Center for Contemporary Medical Research "CoMeT" (Israel), Helios Clinic (Germany), Frankfurt (Oder) Hospital (Germany). The University actively participates in the implementation of international projects of the Erasmus+ program.

KMU NJSC is included in the Directories of medical schools "Avicenna" of the World Health Organization and the World Federation of Medical Education. KMU NJPSC is a member of the Magna Charta of Universities (MCU), the Association of Medical Education in Europe (AMEE), the Association for the Study of Medical Education (ASME), the Association of Medical Education in Asia (AMEA), the Organization for the Protection of PhD in Biomedicine and Healthcare in the European System (ORPHEUS), the University Mobility in Asia and the Pacific (UMAP), the International Association for the Development of Education (IADE), the European Universities Association (EUA).

KMU NJSC is the first medical university of the Republic of Kazakhstan, which successfully passed the certification of the quality management system in 2005 for compliance of educational, scientific and clinical activities with the requirements of the International Standard ISO 9001 series by the certification body NQA – UK (UK), NQA – Russia. In 2015, the university passed the certification in the certification body SGS (Switzerland). In 2016, the university was accredited in the field of healthcare for compliance with accreditation standards for medical organizations providing inpatient care with the assignment of the first category.

According to the educational program (EP) of the residency 7R01102 "Anesthesiology and resuscitation for adults and children", training has been conducted since the 2018-2019 academic year. In the current academic year, 111 residents are trained in EP 7R01102 "Anesthesiology and resuscitation for adults and children": 48 in the third year of study, 40 in the second year of study, 23 in the first year. 76 graduates of the residency were employed in the specialty 7R01102 "Anesthesiology and resuscitation for adults and children" is 100% for the reporting period.

In the educational process of the residency, out of 17 full-time employees of the Department of Emergency Medicine, Anesthesiology and Resuscitation, 8 full-time teaching staff participate, all of whom have the highest qualification category and 50% of the degree.

2.2 Information about previous accreditation

As part of the implementation of the EP "Anesthesiology and intensive care for adults, children" in the educational process of the KMU NJPSC with the previous accreditation by external experts of the Independent Association of Accredited Registrars (IAAR), specialized accreditation was carried out in the specialty 7R01102 "Anesthesiology and intensive care, including children's" in 2018, according to the results of which a license was obtained for training of residents under the number KZ32LAA00016018 in the direction of "Healthcare (medicine)" (code 7R091).

In 2020, the EP in the specialty "Anesthesiology and Resuscitation, including children's" was included in the register of the Unified Higher Education Management System of the Ministry of Education and Science of the Republic of Kazakhstan (MES RK) and is available to the public and all interested persons in the healthcare sector. In 2021 EP was renamed into "Anesthesiology and intensive care for adults and children" (Order of the Ministry of Health of the Republic of Kazakhstan No. KR DSM 43 dated May 25, 2021). The change in the name of the EP was reflected in the ESUVO register.

The availability of IAAR accreditation, registration number AB No. 1783, determines the validity period of the accreditation of the educational program until June 13, 2023 (date of issue June 14, 2018). http://esuvo.platonus.kz/#/register/education_program/application/24235).

2.3 Conclusion based on the results of reviewing the report on the self-assessment of the educational program of the residency in the specialty 7R01102 "Anesthesiology and intensive care for adults and children" for compliance with the Standards of accreditation of postgraduate education programs (residency specialties) of medical educational organizations and conclusions

The report on the self-assessment of the educational program of the residency in the specialty 7R01102 "Anesthesiology and intensive care for adults and children" (hereinafter referred to as the report) is presented on 96 pages of the main text, 65 appendices, copies or electronic versions of supporting documents located at the link <https://drive.google.com/drive/folders/1wN7PUm5XG6nAdhdjz4Ykk6noGDkXfHBQ>

The report is characterised by completeness of answers to all 9 main accreditation standards and criteria, structured taking into account the recommendations of the Guidelines for the self-assessment of the educational programme provided to the educational organisation by the accreditation centre - ECA, as well as internal unity of information. The report is accompanied by a cover letter signed by the Chairman of the Board-Rector A.A. Turmukhambetova, which confirms the reliability of quantitative information and data included in the self-assessment report.

The report contains a list of 9 members of the internal self-assessment commission with an indication of the responsibility of each employee, information about the representative of the organization responsible for conducting the self-assessment of the educational program - Dmitry Vasiliev, Candidate of Medical Science, head of the educational program in the specialty 7R01102 "Anesthesiology and intensive care for adults and children". Self-assessment of the educational program 7R01102 "Anesthesiology and resuscitation for adults and children" was carried out on the basis of the order of the rector of the University No. 274 dated September 16, 2022 "Approval of the working group on self-assessment of educational programs".

The report was reviewed by an academic expert on accreditation: M. D., Professor Daria Muratovna Shabdarbayeva, and the reviews noted strengths and areas for improvement, as well as recommendations for additions and changes, which were taken into account in the feedback process with the representative of the university and the corresponding changes and additions were made to the self-assessment report.

In all standards the real practice of the university on training residents in the specialty "Anesthesiology and intensive care for adults and children", taking into account the beginning of admission of students in 2015, reasoned data, examples of implementation of educational programme objectives, national and international events, methodological support, confirming compliance with the requirements of accreditation standards are given. The description in the self-assessment report is sufficiently complete and updated on the number of residents, teachers, administration, information on selection and admission, training results, results of knowledge and skills assessment, material and technical base of the university and clinical bases, contractual obligations with partners (universities, associations, bases), financial information, plans for development and improvement, etc.

The report is submitted to ECA in a completed form, with data corrected according to the above recommendations, written in a competent language, the wording for each standard is clear and understandable and described in accordance with the criteria of the standards, tables are referenced in the text and are numbered cross-numbered.

The quality of the self-assessment report served as a basis for the transition to the next stage of the accreditation procedure - external assessment. The experts planned validation of the report data, comparison of information from the report with the information that will be obtained during the visit to the educational organisation, i.e. verification of quantitative and qualitative indicators.

3. Description of the external expert assessment

The external expert work within the framework of the evaluation of the educational programme

"Anesthesiology and resuscitation for adults and children" was organised in accordance with the Guidelines for the external evaluation of educational organisations and educational programmes of ECA and according to the programme approved on 11.05.23 by the Director General of ECA S. Sarsenbaeva and agreed with the Chairman of the Board-Rector A. Turmukhambetova.

Dates of the visit to the organisation: 24-26 May 20223.

The external evaluation focuses on validation of the self-assessment report data and verification of indicators indicating the degree of compliance with the criteria of accreditation standards.

The sequence of the 3-day visit is presented in detail in the Visit Programme (hereinafter referred to as the programme), which is in the documentation of the accreditation centre. The Programme is the proof of implementation of all planned activities within the framework of the external expert evaluation.

In order to obtain objective information, the members of the EEC used the following methods and its results:

- interview with management and administrative personnel - 7 people;
- interviews with residents – 84 people;
- exploring the website <https://www.qmu.edu.kz/ru>;
- interviewing 40 employees, 35 teachers and mentors;
- survey of teachers and residents - 32 and 63, respectively;
- monitoring the training of residents: attending 2 practical classes: on the topic "Cardiac conduction disorder" of the discipline "Intensive care in cardiology", the lesson was conducted by Candidate of Medical Science, Associate Professor of the Department of Emergency Medicine, Anesthesiology and Resuscitation Aisanov Bauyrzhan Tezekbaevich with residents of group 10-001 in the specialty "Anesthesiology and resuscitation for children and adults" on the basis of clinics of KМУ NJPSC and on the topic "Premedication in cardiac surgery in patients with cardiac surgery profile" of the discipline "Anesthesia and intensive care in cardiac surgery, perfusion" in groups 8-003, 8-005 (total number of 5 people) in specialty "Anesthesiology and resuscitation for children and adults", the lesson was conducted by Associate professor of the Department of Emergency Medicine, Anesthesiology and Resuscitation Mugazov Miras Mugazovich, on the basis of the clinic of the Regional Clinical Hospital;
- review of resources in the context of the implementation of accreditation standards: 2 bases of practice/clinical engagement were visited, including the clinic of the Karaganda Medical University NJPSC on Ardak str., building 3 and the Regional Clinical Hospital SME in Karaganda on 10A Nazarbayev Ave., where training is conducted in the specialty 7R01102 "Anesthesiology and resuscitation for adults and children" with the participation of 8 full-time teachers and 20 clinical mentors, 15 of whom have a mentor certificate;
- the study of educational and methodological documents placed in 65 appendices posted on Google drive both before the visit to the organization and during the visit to the departments (the list of studied documents is in **Appendix 2**).

On the part of the staff of the accredited organization, the presence of all persons specified in the visit program and according to the lists of interview sites and interviews is ensured (Table 1).

Table 1 - Information on the number and category of participants in meetings, interviews with members of the EEC

No.	Position	Number
1	Chairman of the Board - Rector of Karaganda Medical University NJSC	1
2	Vice-rector for academic work	1
3	Vice-rector for scientific and clinical work	1
4	Head of Career Development Department	1
5	Deans of Schools	6
6	Director of the Institute of Life Sciences	1

7	Heads of Educational Programmes	10
8	Members of the Academic Senate Committee	22
9	Director of the Department of Human Resource Management	1
10	Chief Specialist of the Department of Human Resource Management	1
11	Chief Specialist of the Centre for Simulation and Educational Technologies	1
12	Director - Chief Accountant of the Department of Economics and Finance	1
13	Deputy Director of the Department of Economics and Finance	1
14	Residents	84
15	Teaching staff	35
16	Graduates (residency)	39
17	Employers (residency)	23

The sequence of the visit during May 24-26, 2023 is presented in detail in the Program of the visit, which is in the documentation of the accreditation center and in the Appendix to this report.

On the first day of the visit, on May 24, 2023, a meeting was held with members of the Board of KMU NJPSC with Toleubekov K.K., Turgunov E.M. The Vice-Rector for Academic Affairs K.K. Toleubekov and the Vice-Rector for Scientific and Clinical Work were introduced to the members of the EEC and information about the purpose of the visit was presented. The Vice-Rector announced a strategy for the development of postgraduate education, including residency programs, which indicates a clear vision of the university and interest in improving residency programs taking into account the needs of practical healthcare. Experts asked questions about the academic workload of teachers, clinical mentors. This interview allowed us to obtain evidence that the mission of the residency program and the mission of the university fully correspond to each other.

The issues of internal quality assurance policy in higher and postgraduate education, planning, monitoring of implementation, provision of resources, evaluation of educational programs, work with departments; issues of clinical resources for training residents, research areas of the university, motivation systems and participation in research of teachers of residency departments were discussed. The members of the EEC met with employees of the departments responsible for the admission and employment of graduates with the head of the Career Development Department G.M. Tokzhumanova, Dean of the Residency School V.B. Tashkenbayeva, Dean of Nursing Education K.A. Estemesova, Director of the Biosciences Institute D.A. Klyuev, discussed issues on the formation of state orders for specialties, selection and admission procedures, paid training, career guidance, feedback from applicants and applicants, work with departments, monitoring the employment of graduates, satisfaction with the quality of graduate training.

Interviews with the heads of educational programs made it possible to concretize information about the distribution of working hours of teaching staff, the possibility of realizing creative potential, the equipment of the material and technical base of departments that train under accredited educational residency programs, as well as to evaluate the mechanisms of involvement of residents in the research process and their motivation for the implementation of leadership in science at all levels of education.

An interview with members of the Academic Committee of the Senate, the Commission on School quality assurance by level of education (Master's degree, PhD, residency) allowed experts to find out how the Policy of Internal Quality Assurance in Postgraduate Education functions in the context of ESG. The issues of monitoring educational programs by all stakeholders were discussed. However, no information was received on mechanisms for assessing the validity and reliability of resident assessment methods.

The following tasks of the deanery are also analyzed - the formation of a state order for specialties, the admission of residents, the provision of resources, the evaluation of educational programs of the residency. It is established that the deanery closely cooperates with departments that train residents. The resources of the residency program are provided by cooperation with 52 foreign partners. Within the framework of academic mobility of HETP and students, work is being carried out

to develop partnerships with foreign universities, so during the reporting period, HETP training under accredited programs visited the Russian Federation, South Korea, Lithuania.

Meetings with employees of the Department of Human Resources Management and the Center for Simulation and Educational Technologies; with employees of the Department of Economics and Finance made it possible to clarify the situation about the average age of HETP (52 years), the academic degree holders rate of department staff, the percentage of HETP who speak foreign languages, as well as methods of encouraging teaching staff for scientific activities, the availability of publications at the expense of KMU NJPSC in rating magazines.

The university library was visited. The total area of the library is 1526 sq. m., the book storage area is 941.6 sq. m. The number of seats in the reading rooms is 443 seats. The libraries include: the department of acquisition and bibliography and the department of maintenance of scientific and educational literature (consists of a subscription of scientific literature, two subscriptions of educational literature, a reading room and a hall of periodicals, a hall of electronic resources, an interactive hall). The library's computer park consists of 113 computers, the entire computer park is connected to the Internet. The Wi-Fi zone is distributed throughout the library. There are 2 scanners installed for users in the electronic resources hall. The interactive hall is equipped with a short-focus projector. For students, there is a Researcher's Hall equipped with 15 computers connected to the Internet, which allows them to have access to all information resources of the university. Service of users in electronic halls is carried out from Monday to Friday from 9 am to 8 pm, on Saturday from 9 am to 6 pm. To implement the educational process in the specialty 7R01102 "Anesthesiology and resuscitation for adults and children", the book supply of basic and additional literature is 100%. Of these, the total number of textbooks, including in the Kazakh language, is 1314 copies, scientific literature – 785 copies, periodicals – 4, electronic publications - 7.

We visited the sports hall of the University and the Student Service Center. In the Student Service Center of KMU NJPSC, a student can receive all the necessary documents signed with an electronic digital signature through a personal account on the portal cos.qmu.edu.kz, by pre-ordering the necessary services. The result of the service is sent to the student's e-mail.

In order to assess the compliance of the standard 6 while visiting the Department of Academic Work, the experts were shown the distance learning platform “Platonus” and the own development of the KMU NJPSC “Session”, integrated with the Antiplagiarism system, shows how they are used in the training and evaluation of residents.

In the afternoon, we visited the Center for Simulation and Educational Technologies. The area of the CSET is 1300 sq.m., 42 study rooms. The Center is equipped with more than 400 types of simulation equipment, including 57 high-tech simulators. Visiting the Center is possible as part of the independent work of a resident by appointment in a specially designed form. For the specialty 7R01102 "Anesthesiology and resuscitation for adults and children" there is an extensive amount of simulation equipment, involving the development of basic practical skills in emergency conditions. However, there are no simulation equipment for practicing practical skills in resuscitation measures.

Thus, during the first day of the visit, the expert managed to validate the data of the report on the self-assessment of the educational program according to standards 1,3,7,8 ,9 and partially 2,5 and 6.

On the second day of the visit, on May 25, 2023, in order to assess the resources that ensure the effective implementation of the educational program, the experts visited the clinical bases of the departments. So experts D.M. Shabdarbayeva, G.A. Isposunova, A.K. Dosanova visited 2 bases of practice/clinical training, including the clinic of KMU NJPSC at the Ardak street, building 3, where training is conducted in 3 educational programs: “Anesthesiology and resuscitation for children and adult”, “Pediatric surgery”, “Urology and andrology for adults and children”, and Karaganda Regional Clinical Hospital SME at 10A Nazarbayev ave., where training is conducted in 2 educational programs: “Anesthesiology and resuscitation for children and adult” and “Urology and andrology for adults and children”. Meetings were held at the clinical bases with the heads of educational residency programs in the specialty 7R01106 "Pediatric surgery" M.S. Askarov, 7R01102 "Anesthesiology and

resuscitation adult and children" D.V. Vasiliev and 7R01128 "Urology and andrology adult and children" E.M. Asamidanov

According to the individual plan of the resident (IPR), residents receive an educational and methodological complex of the discipline with the designated final results of the educational program. Revision of the thematic plan, with the inclusion of relevant topics, the development of a catalog of elective disciplines is carried out annually. The material and technical support of departments and clinical bases, classrooms, places of work and recreation of residents were studied. It is established that the clinics are equipped with modern resuscitation equipment and equipment for emergency conditions and anesthesia. In the operating blocks, residents of the 3rd year of the specialty 7R01102 "Anesthesiology and resuscitation for adults and children" demonstrated the independent performance of anesthesia to patients. The operating unit is distinguished by the presence of a large number of operating rooms, where various operations are performed in different directions (gynecological, surgical and others). Residents of all courses of specialty 7R01102 "Anesthesiology and resuscitation for adults and children" have free access to the provision of emergency and resuscitation conditions and anesthesia. Access to the IHIS and DAMU electronic systems is carried out independently, subject to the employment of a resident doctor, or using the login / password of a clinical mentor. In the resident's office, personal computers are allocated for access to IHIS and DAMU residents.

According to the IPR, the resident doctor participates in day/night shifts, which is reflected in their portfolio along with the total number of mastered skills, assists, self-performed manipulations and operations.

There is a specially designated room for lunch and relax. There is a cloakroom for students on the first floor of the MPI.

The expert studied the documentation on the educational program 7R01102 "Anesthesiology and resuscitation for adults and children" at the link <https://drive.google.com/drive/folders/1wN7PUm5XG6nAdhdjz4Ykk6noGDkXfHBQ>, which confirmed compliance with *accreditation standards, including documentation on 8 teachers and 20 mentors of residents and, at the request, documentation of the EEC members.*

In the clinic of KMU NJPSC, experts attended a practical lesson in the CBL format on the topic "Cardiac conduction disorder", the discipline "Intensive care in cardiology". The lesson was conducted by the Candidate of Medical Sciences, Associate Professor of the Department of Emergency Medicine, Anesthesiology and Resuscitation Aisanov Bauyrzhan. There were residents of group 10-001 in the specialty "Anesthesiology and intensive care for children and adults".

In the clinic of KGP "Regional Clinical Hospital" attended a lesson on the topic "Premedication in cardiac surgery in patients with cardiac surgery profile", discipline "Anesthesia and intensive care in cardiac surgery, perfusion", groups 8-003, 8-005 (total number of 5 people) specialty "Anesthesiology and intensive care for children and adults". The lesson was conducted by Associate Professor of the Department of Emergency Medicine, Anesthesiology and Resuscitation Mugazov Miras.

In the afternoon, interviews were conducted with students, teachers, graduates and employers of educational residency programs.

In general, all residents noted the sufficiency of library and electronic resources, the availability of communication with university staff and representatives of practical healthcare, the conduct of research projects and the possibility of passing an on-site residency within the framework of the educational program to the appropriate medical institutions. Residents showed their commitment to the organization of education, were active in answering questions from external experts, demonstrated their judgments on the organization of training, assessment of their skills, and advisory support. In an interview with students, almost all residents are satisfied with the organization of the educational process, material and technical conditions. Among the participants of this interview were representatives of students who are members of the Residency School Council, confirming the participation of student stakeholders in the creation and revision of residency educational programs. Of the possible improvements in the educational process, the students themselves note limited academic mobility and show a desire to exchange experience and knowledge not only within the Republic of

Kazakhstan, but also in the countries of the near and far abroad. Residents of specialty 7R01102 "Anesthesiology and intensive care for adults and children" took an active part in the interview, noting favorable conditions for learning and acquiring practical skills. One resident works part-time at the simulation center, being a tutor for undergraduate studies. They noted their active participation in research work with the writing of scientific articles.

The interview with the teachers took place as part of a confidential conversation. Almost all employees of the university show satisfaction with working conditions and their salaries. Over the past year, there has been an increase in wages due to the inclusion of the treatment rate in the basic rate. Taking into account the categorization the HETP also has a motivational influence, since the contribution to both educational, scientific and educational activities is evaluated differentially.

The HETP of the KMU NJPSC implements 15 scientific and technical projects, the introduction of the positions of research assistant, associate research professor and research professor allows you to shift the focus to research work by limiting the academic load from 650 hours to 200 hours per year. The system of encouraging HETP in the KMU NJPSC also includes bonuses for publishing articles in rating journals included in the Scopus database and Web of Science. Experts have found that teachers initiate research topics for residents, stimulate the need for additional training and independent work with literature, medical documentation.

One of the important tools of accreditation expertise is conducting interviews with employers - representatives of practical healthcare who are not affiliated with the KMU NJPSC. During the interview, it was possible to establish that, in general, employers are satisfied with the competencies of graduates. Interviews with employers on all accredited educational residency programs of the KMU NJPSC were conducted offline and included such questions as: knowledge of the mission of the university, participation in the development of the mission and proposals to the strategic plan, participation in the work of advisory bodies of the KMU NJPSC, satisfaction with the basic knowledge and skills of residents, participation in the training of residents through mentoring, provision of the department and residents with the necessary resources for practical training and the formation of clinical thinking, about the problems of interaction with departments and universities in general, 100% employment of graduates of the residency. Employers have shown interest in developing communication skills among graduates of the residency.

Thus, during the second day of the visit, the EEC experts managed to validate the data of the report on the self-assessment of the educational program according to the standards 2,3,4,5,6,7,8,9.

On the last day of the visit to the organization, a meeting of EEC members was held on the results of an external assessment. The final discussion of the results of the external assessment of the educational program, the study of documents, the results of interviews, interviews, questionnaires was held. The members of the EEC started designing the final report. Generalizations of the results of external assessment are made. The experts individually filled out the "Quality profile and criteria for external evaluation of the educational program 7R01102 "Anesthesiology and intensive care for adults and children" for compliance with ECAQA accreditation Standards." No comments were made by the members of the EEC. Recommendations on improving the educational program were discussed and the Chairman H.I. Kudabayeva held a final open vote on recommendations for the ECAQA Accreditation Council for the accreditation period of 5 years.

Comfortable conditions were created for the work of the EEC, access to all necessary information and material resources was organized. The Commission notes the high level of corporate culture of the University, the high degree of openness of the team in providing information to the members of the EEC. In general, it can be noted that favorable conditions have been created in the Karaganda Medical University NJSC for the implementation of the educational process, the creative potential of the teaching staff and adequate training of medical specialists, according to the requirements of modern society.

During the questionnaire survey of residents - 88.9% assessed the work of the External Expert Commission on Accreditation as positive, 9.5% - as satisfactory. The majority of respondents (85.7%) believe that it is necessary to carry out accreditation of the educational organisation or educational

programmes.

According to 90.63% of teachers, the questionnaire survey conducted by ECA is useful for the development of recommendations on improvement of key areas of activity of the accredited educational organisation. 40.6% of the HETP noted that they were personally involved in the activities on preparation for the accreditation of EP as a member of the internal self-assessment commission, 9.4% were engaged in technical support before the ECA EEC meeting, 31.3% wrote sections of the self-assessment report, 50% - collected information for annexes to the self-assessment report. 6.3% of the HETP noted that they were not involved in the preparation of the university for accreditation and 3.1% found it difficult to answer. To the questionnaire "Would you personally like to become an expert on ECA accreditation and quality assurance of education and health care" -28,1% expressed a desire, 18,8% were not interested in this question, 18,75% had already participated in the work of accreditation commissions of this accreditation centre and 34,4% of HETP had difficulties in answering it.

75% of the HETP believe that the work of the EEC on accreditation can fully cover all the issues related to the quality of implementation, as the visit of the commission is preceded by the stage of programme self-assessment and report writing. 53,1% of the HETP connect this with the fact that the commission examines all the main processes of programme implementation. 40,6 % believe that it depends on the fact that the programme of the commission's visit includes interviews and interviews with stakeholders that allow drawing conclusions about the quality of education, 37,5 % of respondents believe that the programme of the commission's visit is rich and covers all key aspects of education and 15,6 % of teachers are sure that everything depends only on the professionalism and competence of accreditation experts.

Among the activities of the EEC on accreditation, the most important and allowing to obtain evidence of compliance with accreditation standards, the HETP noted: interview with the management - 3.1%; interview with the head of the EP - 3.1%; interviews with students - 15.6%; interviews with employers' representatives - 6.3%; visits to internship sites - 9.4%; reviewing the self-assessment report of the programme - 3.1%; attendance of practical classes - 3.1%. 56.3% note that a single activity cannot solve, but only all of the above listed in the complex.

At the end of the visit programme, the Chairperson of the EEC announced recommendations on the results of external evaluation within the framework of specialised accreditation for the management and staff of the educational organisation.

Conclusion on the results of the external assessment:

The members of the EEC carefully studied and evaluated the main indicators of the accredited educational program. The information received by the expert during the study of the self-assessment report, during the preparation of a written review with recommendations for improvement, the implementation of the activities of the **visit program of the KMU NJPSC dayed May 24-26, 2023 is analyzed**. All the information received was compared with the data of the self-assessment report, validation of information on each criterion of accreditation standards and verification of the indicators of the annex to the self-assessment report was carried out, which made it possible to verify the reliability of the information provided by the university and the supporting 31 documents for compliance with the ECAQA Accreditation Standards.

Prior to the visit to the organization by studying the appendices to the report provided by the Department of Postgraduate Education and access to 65 applications in Google drive <https://drive.google.com/drive/folders/1wN7PUm5XG6nAdhdjz4Ykk6noGDkXfHBO> experts reviewed 65 applications with documents and visual inspection of documents, as well as during an external expert assessment, the members of the EEC studied the main documents (mission, strategic plan until 2025, TP disciplines, syllabuses, control and measuring tools, checklists, resident portfolios, individual plans of residents of different years of study, publications of teachers, the rules of admission to the residency, personnel policy, the program of the internal quality assurance system, training resources were viewed directly at the clinical bases of the departments (classrooms, office

equipment available for residents to work with literature, patient documentation, educational and methodological literature), residency resources on the website of the KMU NJSC, which allowed to identify compliance of the educational organization's activities with the basic accreditation standards.

The accredited educational program 7R01102 "Anesthesiology and resuscitation for adults and children" was developed on the basis of the current SCES for the first time in 2018, updated every year. The duration of training is 3 years. Currently, 111 residents enrolled in 2020-2021, 2021-2022, 2022-2023 are studying.

The educational and methodological, personnel and resource bases were evaluated for compliance with accreditation standards. Through interviews with teachers and interviews with residents in various specialties, it was possible to determine their direct participation in the development, evaluation of educational programs, decision-making on a number of key issues in the selection of clinical bases, elective topics, participation in appeal commissions for the admission and evaluation of residents, the development of the content of individual resident plans and the selection of mentors. Residents of specialty 7R01102 "Anesthesiology and intensive care for adults and children" take an active part in the work of collegial bodies of the University.

Recommendations for improving activities in the field of implementing the educational residency program in the specialty 7R01102 "Anesthesiology and intensive care for adults and children" for compliance with accreditation Standards, developed by the EEC based on the results of an expert assessment, were presented at a meeting with the management on May 26, 2023.

The program of the 3-day visit (May 24-26, 2023) of the external expert evaluation of the EEC has been completed in full. On the part of the university staff, the participation of all persons specified in the program is ensured.

Thus, the external evaluation and the visit of the EEC members allowed for the verification and validation of the data of the self-assessment report of the residency program in full in accordance with the Regulations on the External Expert Commission, the Guidelines for External Evaluation of the Medical Organization of the ECAQA education.

Comfortable conditions were created for the work of the EEC, access to all necessary information and material resources of the accredited educational program was organized. Experts note the high level of corporate culture and discipline of the employees responsible for postgraduate education of the KMU NJPSC, the high degree of openness of the team in providing information to the members of the EEC.

4. Analysis of compliance with accreditation standards based on the results of an external assessment of the residency educational program in the specialty 7R01102 "Anesthesiology and resuscitation for adults and children"

Standard 1: MISSION AND END RESULTS

Evidence of compliance:

1.1 Mission statement and final results

The mission of the educational program (hereinafter EP) in the specialty 7R01102 "Anesthesiology and resuscitation for adults and children" is to train highly qualified specialists in the field of anesthesiology and resuscitation, including children, who are able to meet the needs of society in providing qualified intensive care to patients of various profiles, apply and develop advanced innovative technologies in anesthesiology and resuscitation, science and practice, to use the achievements of information and communication technologies, to strengthen the health of the population. The University is the largest medical university in the country, training specialists at all levels of higher and postgraduate education, in all areas in the field of healthcare. The University's activities are based on the integration of academic, scientific and clinical activities to provide high-quality and modern medical care to the population and the training of professional personnel.

When implementing the activities of the visit program, namely, following the results of an interview with the heads of the organization, in interviews with residents and teachers, compliance

with the criteria of **standard 1** was established. All participants in the educational process know the mission of the educational program, took part in the formation of proposals for the formulation of the mission, while the mission was brought to the attention of potential residents through the website, social networks, informational letters to medical organizations. The strategic plan of the organization for 3 years has been reviewed, confirming the implementation of the accreditation standard and demonstrating the goals, objectives and prospects of the organization. From interviews with doctoral students, it was found that before the start of classes, teachers inform about the mission, work plans of the educational organization, tell where to get the necessary information about the educational program, teachers, training bases. The University has all the resources necessary to form professional qualities and achieve the final results stated in the mission of the educational program in accordance with national and international requirements and needs of the healthcare sector.

The educational program in the specialty 7R01102 "Anesthesiology and resuscitation for adults and children" was developed according to the State Residency program for medical specialties, the standard professional curriculum for medical specialties of the residency (Appendix 2). The educational program for first-year residents enrolled in 2022 was developed collectively and available on <https://drive.google.com/drive/folders/1wN7PUm5XG6nAdhdjz4Ykk6noGDkXfHBQ> . The mission of the EP was brought to the attention of all employees of departments, residents by posting syllabuses and information about the residency on the University's website <https://www.qmu.edu.kz/ru/hall/ask> .

The results of studying the documentation demonstrate that the mission of the organization and the mission of the educational program of the residency in the specialty 7R01102 "Anesthesiology and resuscitation for adults and children" and the educational process are built in accordance with the State Educational Standards and current laws and regulations (L&R) in postgraduate education and healthcare.

1.2 Professionalism and professional autonomy

Visiting the clinical base, attending open classes, meetings with teachers and residents made it possible to see that, adhering to a patient-centered approach in the clinical process, while maintaining the need for assistance, each resident has an individual level of such quality as professionalism. The formation of professionalism is formed on the basis of direct training at the workplace, where residents face clinical situations of resuscitation and anesthesiological practice of various levels of complexity, adopting the experience of senior colleagues, and thereby building their own behavior model.

Based on the Law on Education of the Republic of Kazakhstan, which enshrines the autonomy of organizations of higher and postgraduate education, which gives the right, on the basis of standard rules, SCES 2022, the University determines independently the development of an educational program, assessment, selection and admission of residents, selection of teachers, employment conditions and allocation of resources. Freedom in the compilation of the EP is achieved in the compilation of syllabuses, CED, IEP, WC, the form, structure and order of development of which is determined by the organization independently. All educational and methodological documentation is reviewed and approved at meetings of the EPC, Academic and Board of Studies.

56 residents participated in the survey. Of these, 25.4% are residents of the first year of study, 44.44% are residents of the 2nd year of study, 15.87% are residents of the 3rd year of study. Based on the results of the survey (on the resource <https://webanketa.com/>) 80.95% of respondents fully agree that they will recommend studying at this educational organization to their acquaintances, friends, relatives, 17.46% of respondents are partially agree with this statement, and 0% of respondents completely disagree with this statement, 1.59% of respondents doubt the answer.

82.54% of residents are fully agree with the statement that program managers and teachers are aware of the problems of residents related to learning, 15.87% of residents are partially agree, 1.59% of residents completely disagree with this statement.

According to the survey results, 79.37% of respondents believe that program managers and teachers constantly involve students in the work of advisory bodies (methodological council, academic council, committees of educational programs), 4.76% answered that no, they do not involve, while

11.11% do not know about it, 4.76% doubt the answer, and 5.3% expressed the opinion that they are sometimes involved in this work.

90.48% of residents are fully satisfied with the conditions and equipment and classrooms of this educational organization, 7.94% of residents are partially satisfied, and 1.59% of residents are completely dissatisfied.

32 teachers surveyed, including those with experience up to 5 years - 6.25%, from 5 to 10 years – 12.5%, over 10 years experience – 81.25%. Among the HETP, residencies accounted for 78.13%.

87.5% are fully satisfied with the organization of the educational process, 12.5% are partially satisfied. 93.75% of respondents are completely satisfied with the organization of work and workplace, 6.25% of respondents are partially satisfied. There is an opportunity for career growth and competence development for teachers in the organization: 90.63% fully agree, 9.38% partially agree.

1.3 Final learning outcomes

In the EP of the residency in the specialty 7R01102 "Anesthesiology and resuscitation for adults and children", developed on the basis of the Order of the Minister of Health of the Republic of Kazakhstan No. KR DSM-63 dated July 4, 2022 "On the approval of the state mandatory standards for the levels of education in the field of healthcare", which takes into account the main final results of the resident's training.

The final results of the resident's training are described in the TM and the self-assessment report of the educational program and it was decided not to include it in this document.

The goals and final results of training in the EP implemented by the HEI are presented in the register of the ESUVO of the MES RK http://esuvo.platonus.kz/#/register/education_program/application/24235. During interviews with students, all respondents answered in the affirmative to questions about the availability of direct interaction with patients, the possibility of developing communication skills, satisfaction with the professionalism of the teaching staff and mentors, resources for the realization of scientific potential. *During the interview with the graduates of the KMU NJPSC, it was noted that there is a need to strengthen the training of residents in the field of regulatory relations*

Experts have established a clear continuity between the final results of the previous training of residents (prerequisites) and training in residency, and subsequent programs of continuous professional development. The organization has developed 60 additional education programs posted on the website <https://www.qmu.edu.kz/ru/contents/view/1349>, including for the specialty "Anesthesiology and resuscitation". Residents are informed about this.

1.4 Participation in the formulation of the mission and final results

During the conversation with residents and employers, experts received a clear answer to the question "Do you participate in the formulation of the mission and goals of the organization, the educational program?", "What is the personal contribution of residents to the improvement of the educational program?". To these questions, residents of the specialty "Anesthesiology and intensive care for adults and children" noted that they are part of collegial bodies where they have the opportunity to express their opinions and put forward any ideas. Employers of this specialty also noted their active participation in the discussion of the mission and educational program. The chief anesthesiologist of the Karaganda region noted that they actively participated in the discussion of the mission of the specialty, made their suggestions in the development of the educational program and final results. *Residents in 79.37% of the survey noted that program managers and teaching staff involve students in the work of advisory bodies (methodological council, academic council, EPC). The answer is no, 4.76% showed no involvement and 11.11% of respondents do not know anything about it, 4.76% of respondents doubt the answer.*

Conclusions of the EEC according to the criteria. Out of 17 standards comply: fully - 17.

Standard 1: completed

There are no recommendations for improvement identified during the external visit: none

Standard 2: EDUCATIONAL PROGRAM

Evidence of compliance:

2.1 Framework parameters of the postgraduate medical education program

The educational process in the KMU NJPSC is organized in accordance with the "Rules of the organization of the educational process on credit technology of training" (Order of the Ministry of Education and Science of the Republic of Kazakhstan dated April 20, 2011 No. 152). EP "Anesthesiology and intensive care for adults and children" was developed taking into account the modular technology of training and the transition to ECTS credits. (<https://qmu.edu.kz/ru/contents/view/314>).

For the implementation of the educational program in the specialty 7R01102 "Anesthesiology and resuscitation for adults and children", the organization's documents contain the TM, where the goal is defined, the integration of practical and theoretical components, independent work is taken into account. Compliance with the SCES and standard requirements has been established. Attending a seminar on the topic "Cardiac conduction disorder", the volume of hours is 2 hours, the experts received convincing data that the training is carried out according to plan, residents answer tests before the start of the lesson, receive feedback from the teacher, the seminar was held in the CBL format. The organization ensures compliance with ethical aspects in the implementation of the educational program, as the experts studied the Academic Policy and during the interview, residents replied that they were informed about the content of this document. The organization ensures compliance with ethical aspects in the implementation of the educational program, as experts have studied the Code of Business Ethics (Annex 8 to the decision of the Board of Directors dated August 24, 2019, Protocol No. 4 <https://disk.yandex.ru/i/3OCEjXaXUU53mw>) and during the interview, residents replied that they were informed about the contents of this document.

The analysis of educational activities showed that the scientific basis and all the achievements of science in the advising disciplines were taken into account, additions were made to the bibliography of the TM and syllabuses, and teachers apply them in the classroom. Residency training is carried out taking into account the principles of continuity of basic medical education, postgraduate and continuing medical education throughout professional life.

In the educational program of the residency in the specialty 7R01102 "Anesthesiology and resuscitation of adults and children", the continuity of education is observed on the basis of the established final results of undergraduate and internship studies. Transparency of the process of training residents, including methods, tools of training and evaluation, are implemented by informing on the university's website, Platonus AIDS. The mentoring system, which is described in the document "Regulations on Clinical Mentoring", was evaluated. There are 20 mentors in total, whose tasks are to assist the resident in mastering and improving the necessary clinical skills – "on-the-job training". *95.24% of the surveyed respondents noted that they were satisfied with the mentors' activities, 4.76% - partially satisfied.*

The procedure for informing residents about their rights and obligations is reflected in the "Academic Policy". https://drive.google.com/drive/folders/1fN2AjXp2PidFazaKDdXGPT-BM835CmLw?usp=share_link

This indicates compliance with Standard 2 in terms of adapting training to the needs of residents. At the same time, along with the principles of quality and academic integrity, which are described in the document "Academic Policy" of KMU NJPSC in order to ensure the principles of academic integrity in accordance with paragraph 37 of Annex 5 of the Order No. 595 of the Minister of Education and Science of the Republic of Kazakhstan dated October 30, 2018 "On approval of Standard rules for the activities of educational organizations of appropriate types" conducts verification of theses, master's theses, articles, monographs, guidelines, textbooks, etc. for elements of plagiarism and to determine the level of originality using StrikePlagiarism electronic software.

2.2 Scientific method

At KMU NJPSC scientific research is a mandatory component of training and implies the integration of educational, practical and research processes, with the result in the form of publications

of scientific papers, presentations at conferences of various levels. All students of the residency are actively involved by the staff of clinical departments and the Department of Science in the recruitment, analysis and statistical processing of material.

Knowledge of the basics of evidence-based medicine is mandatory in the course of residency training in the specialty 7R01102 "Anesthesiology and resuscitation for adults and children", the EP provides for the training of residents in the skills of critical evaluation of literature, articles and scientific data by writing abstracts, presentations in accordance with the thematic plan of the discipline. Residents of the specialty 7R01102 "Anesthesiology and resuscitation for adults and children" take an active part in the research activities of the university, which is proved by the scientific publications presented, which are reflected on the Google drive. https://drive.google.com/drive/folders/1fN2AjXp2PidFazaKDdXGPT-BM835CmLw?usp=share_link When talking to residents, experts learned that they use scientific data in training and know the basics of evidence-based medicine. The teachers said that they teach residents methods of critical evaluation of literature, articles and scientific data, the use of scientific developments.

When interviewing residents, the resident of the specialty 7R01102 "Anesthesiology and resuscitation for adults and children" noted his active participation in scientific work with the staff of the department and directly with the clinical and mentor performing research work. *During the survey of residents, it was found that the university has access to the participation of students in research work. 92.06% of residents fully agree with the statement that KMU NJPSC has access to participate in research work, 6.35% partially agree with this statement, 1.59% of residents disagree. To the question "Are you currently engaged in research work?": "yes" - 74.6%, "no" - 11.11%; "I plan to start" - 11.11%; "in search of a research topic" - 1.59%; "I don't want to do research" - 1.59%. 41.27% of the surveyed residents noted that they had personally published one scientific printed work (articles, abstracts, review), more than one – 39.68%; none – 3.17%; plan to publish in the near future – 11.11%; no answer 3.17%; I just enrolled in a training program – 1.59%.*

2.3 Structure, content and duration of the residency program

The content, scope and sequence of the courses of the OP residency 7R01102 "Anesthesiology and resuscitation for adults and children" strictly comply with the SCES 2022. The basis for achieving the objectives of training in the specialty is the acquisition by residents of the necessary knowledge and key competencies, profiling disciplines (PD) of the main component and the component of choice

Training in the residency 7R01102 "Anesthesiology and intensive care for adults and children" is carried out full-time, the training period is 3 years. Based on the SCES 2022 in the ESUVO (<http://esuvo.platonus.kz/#/>) a Working curriculum has been compiled for 1st year residents, the passport of the Educational Program "Anesthesiology and intensive care for adults and children" has been updated. While the report period the 2nd and 3rd year students were engaged in SCES 2020..

There are documents containing requirements for the structure and content of educational programs, including a standard program in the specialty 7R01102 "Anesthesiology and resuscitation for adults and children" in 2022. The responsibility for the choice and introduction of innovations in the educational process is borne by the department and teachers of the profile disciplines. Despite the completeness of the subjects of the disciplines, there are some points that require additions. It is necessary to include issues of jurisprudence and forensic medicine in the disciplines.

For the successful implementation of the educational program in the specialty 7R01102 "Anesthesiology and intensive care for adults and children", there are sufficient resources to organize the assessment of practical skills of residents (powerful clinical bases, simulation center). 90.48% of residents noted that they were completely satisfied that there was a sufficient number of patients for supervision or assistance in operations; 4.76% - partially satisfied; 4.76% did not respond. 95.24% of residents are fully satisfied with the content of the educational program (list of disciplines): 3.17% of residents partially agree; 1.59% of residents doubted the answer.

Teachers provide residents with methodological and didactic materials, additional literature to prepare for classes. 90.4% of residents fully agree that teachers provided them with methodological and didactic materials, additional literature to prepare for classes, 9.5% of residents partially agree.

Working curricula contain all the disciplines of the mandatory component of the standard curricula developed by the State Educational Institution of the Republic of Kazakhstan in this specialty, on the basis of which training is conducted. The distribution of disciplines by hours, semesters is carried out by the EPC and the Dean's office of internship and residency according to the SCES, the MC and the list of elective disciplines, coordinated with the vice-rector for academic activities. An individual working curriculum is formed for each resident for the entire period of study, coordinated with the curator and approved by the Dean of internship and residency. The individual work plan reflects the training schedule, the mode of classes (number of hours per day), the list of sections and disciplines, the number of hours by sections and disciplines, types of training sessions, forms of knowledge control. Syllabuses indicate the place and time of training consultations for each resident.

In the academic year, one academic period is provided, ending with an intermediate certification (or final certification in the final year). Vacations are granted to students once during the academic year, the total duration of which is at least 5 weeks, with the exception of the final course.

Residency training includes classroom work, independent clinical work under the guidance of a teacher/clinical mentor and the student's independent work (hereinafter referred to as SIW). The volume of classroom work is 10% of the volume of each discipline, independent clinical work under the guidance of a clinical mentor – 75%, SIW – 15%.

The schedule of training sessions in the disciplines of the EP is completely satisfied with 92.06% of the residents surveyed.

2.4 Organization of training and the relationship between postgraduate medical education and medical care

The responsible Vice-rector for the educational activities of the residency is the Vice-Rector for academic activities. Clinical bases are selected by the department, and their compliance with the training opportunities under the residency program is determined by the Department of Clinical Work. Training of residents in the specialty 7R01102 "Anesthesiology and resuscitation for adults and children" is conducted at the KMU NJPSC clinic at the Ardak street, Regional Clinical Hospital SME on Nazarbayev avenue 10A

The clinics have been accredited. The drafting of a contract and a comprehensive plan of joint work with clinical bases is under the control of the Department of Clinical Work of KMU NJPSC.

The management of the educational process reflected in the self-assessment report (**standard 2**) and general approaches to management were confirmed during a visit to the Postgraduate Education Center and conversations with the head and employees. At the same time, the verification of **Standard 2** showed that there is all the necessary documentation for the implementation of the educational program of the residency in the specialty 7R01102 "Anesthesiology and intensive care for adults and children". The experts got acquainted with the work of the departments of clinical bases, visited libraries, a total of 11 meetings were held and during a cross-interview it was established that the implementation of the educational program meets the requirements.

In a conversation with residents, experts saw that the organization promotes the development of practical competencies of residents. At the same time, residents deepen their theoretical knowledge, develop communication skills.

The training of residents in the specialty 7R01102 "Anesthesiology and intensive care for adults and children" is aimed at meeting the needs of practical healthcare, since 23 people were identified during the analysis of the shortage of specialists in 2022. Therefore, this organization is specialized in the field of anesthesiology and resuscitation and provides a lot of opportunities and conditions for qualified training of specialists. Thus, during an interview with the management of the organization, experts received information that resident anesthesiologists and resuscitators are trained directly at their clinical bases and at the Central Medical Center, and teachers confirmed that the training of residents is carried out directly in clinical departments (KMU NJPSC clinic at the Ardak street, Regional Clinical Hospital SME on Nazarbayev avenue 10A). Residency in the specialty "Anesthesiology and resuscitation" is implemented mainly on the basis of the University Clinic of

KMU NJPSC with an area of 2122 sq. m., for 100 beds and 120 outpatient visits), and has also concluded 57 contracts with medical organizations of the Karaganda region. Residents of this specialty can supervise patients of the intensive care unit, perform anesthesia during operations and learn emergency skills in the Central Medical Center.

This is facilitated by mentoring, which is carried out in the KMU NJPSC. Mentors of resident anesthesiologists and resuscitators are doctors with the highest qualification category (20 people) who have passed certification. Teachers provide residents with methodological and didactic materials, additional literature to prepare for classes.

90.4% of the surveyed residents fully agree that teachers provided them with methodological and didactic materials, additional literature to prepare for classes, 9.5% partially agree.

The University has its own clinical base for 30 therapeutic beds and a pulmonologist's office for outpatient reception of patients, as well as concluded agreements with medical organisations "Regional Clinical Hospital", "Children's Clinical Hospital of Karaganda, "Regional Centre of Phthiopulmonology", Hospital of the Medical Centre of the Presidential Administration of Astana), where residents are assigned to the department/cabinet of a pulmonologist and manage a certain number of patients while studying profile disciplines.

To the question of the survey "Is there enough time for practical training (patient supervision, etc.)", 90.5% of residents answered with full agreement, 4.8% partially agreed, 4.8% did not answer. According to the results of the questionnaire, 92.1% responded that after the completion of classes the instructor constantly gives them feedback (listening to your opinion, conducting mini questionnaires, working on mistakes), 7.94% believe that sometimes.

95.2% of residents were fully satisfied with the content of the education programme (list of disciplines): partially - 3.2%; 1.6% were in doubt. At the same time, to the question "Are residents' representatives involved in the development of educational programmes?", the experts received the following answer: "Yes, constantly" 79.4%, "No, they are not involved" 4.8%; "I don't know anything about it" 11.1%. Resident representatives are part of collegiate bodies such as the EPC, Residency School Council, and Senate, where they have the opportunity to discuss the EP. In addition, resident representatives are present at department meetings when the EP is being approved and discussed. And also residents mainly made proposals on the topics of speciality electives.

92.1 per cent of the surveyed residents are fully satisfied with the schedule of training sessions

Conclusions of the EEC according to the criteria. Out of 30 standards comply: fully -29, partially - 1, do not correspond - 0.

Standard 2: completed

Recommendations for improvement identified during the external visit:

1) Include issues of jurisprudence and forensic medicine in the thematic plans of disciplines (Standard 2, paragraph 2.3.1.).

Standard 3: ASSESSMENT OF RESIDENTS

Evidence of compliance:

3.1 Assessment methods

The applied system of assessment of knowledge, skills and abilities of students in the KMU NJPSC corresponds to the accepted practice at the national level and is defined in the SOP "Development and approval of the system of evaluation of educational achievements". According to the Academic Policy of the KMU NJPSC, the syllabuses for each discipline indicate the types of final control and the calculation of the final grade for the discipline/ module. The specified calculations of the TRA, FCE of the discipline/module are included in the AIDS "Platonus", "Session" by the staff of the AMA, the Department and the Department of Digitalization and are used in the system when forming the TRA and ITD statement. The type of control, training method and assessment methods are taken into account when filling out the electronic journal of HETP of departments in AIDS "Platonus" and determines the peculiarity and originality of the electronic journal of the SOP "Electronic journal maintenance".

To validate the assessment of residents, employees of basic institutions and patients are involved (360 degree assessment). Scientific work is reviewed and evaluated when residents speak at conferences, publish articles. The review of control and measuring instruments is carried out at several levels – inside the department – from an employee of the department, inside the university – from an employee of the university or external review, when employees of external organizations, associations or employers act as reviewers. Reviews are recorded at a meeting of the department or meetings of the EPC.

The study of control and measuring tools (tests, situational tasks, control questions) showed that the appropriate evaluation policy has been implemented in the KMU NJSC, which allows a comprehensive assessment of the educational achievements of residents. During the interview, residents talked about the forms of assessment, for example, the use of assessment sheets to assess practical skills and about their satisfaction with everything. They also receive regular feedback from teachers. The system of appeal of evaluation results is reflected in the document "Academic Policy" and during the period of work of the organization of education there were no precedents of appeal at the department.

So, to verify the data of **Standard 3**, the experts asked the managers questions about where the rules for conducting the current, intermediate and final certification are prescribed, and checked the documents and methods for assessing residents. There is a database of test tasks in the amount of 250-400 per discipline for 3rd-year residents, residents of the 1st and 2nd courses have 10-20 extended clinical tasks for each discipline for the "Session" platform, which were compiled by the developers of the EP and approved at the AC meeting. The control and measuring instruments are reviewed by internal and external experts. The head of the Education Department replied that additions and updates of FI are planned to be carried out annually.

During a visit to the clinical base and during an interview with the head of the department, Ph.D. Vasilyev D.V., the commission made sure that there is a documentation system that is transparent and accessible to all teachers and staff, and includes such documents as annual plans, annual reports, regulations of departments, contracts with teachers and residents, in full educational and methodological documentation (EP, working curriculum, syllabuses, journals), evaluation tools (checklists, statements), certificates, certificates and verifications. A review of the website showed that its pages contain the necessary information for residents of the TM and there is information that is regularly updated.

The conducted questionnaire survey showed that 9.65% of residents were fully satisfied with the methods of knowledge and skills evaluation, while 6.35% were partially satisfied. The 92.6% of respondents answered that teachers regularly apply active and interactive teaching methods in their classes, 4.76% expressed the opinion that such teaching methods are applied only sometimes, "rarely" - 1.59%, "don't know what it is" - 1.59%.

According to the results of the survey, the 92.06% of respondents said that after the end of the class the instructor constantly gives them feedback (listening to your opinion, conducting mini questionnaires, working on mistakes), 7.94% of respondents believe that sometimes.

3.2 The relationship between assessment and learning

During the visit to the KMU NJSC, the members of the EEC confirmed that the methods of assessment of residents are comparable with the methods of teaching and cover the assessment of all the competencies of students, both during practical classes and during exams.

The results of the assessment of residents are documented as follows: assessment sheets are filled in, the assessment is displayed, and entered in the journal. During the passage of each discipline, resident anesthesiologists and resuscitators solve advanced clinical tasks on the "Session" platform, which was developed by the university staff and has a patent. But this program does not provide for evaluating the validity and reliability of evaluation methods.

The department evaluates the reliability and validity of assessment methods by examining assessment sheets on an ongoing basis, analyzing and approving tests. However, there is no program to determine the validity and reliability of resident assessment methods.

When conducting interviews with teachers regarding assessment methods, experts received convincing information that an objective assessment of theoretical knowledge is carried out using an oral survey and testing, practical skills using checklists, solving clinical problems on the "Session" platform. Residents also shared their opinion on the timeliness of providing tests, consulting before exams, the clarity of the entire assessment procedure and its fairness.

During the visit, the management was asked the question: "Are external examiners involved in order to improve the fairness, quality and transparency of the assessment process?". And the answer was received that during the Final State Certification of residents, leading specialists from practical healthcare are involved as chairmen and members of the SAC. Experts examined the resources for organizing the assessment of knowledge and practical skills, namely, a simulation center with evaluation sheets for each practical skill. However, for resident anesthesiologists and resuscitators, simulation equipment is available only for testing and testing practical knowledge of emergency conditions. There are no simulation equipment for resuscitation pathology.

The interviewed representatives of employers also pointed out that the training of graduates of KMU NJSC corresponds to the modern development of medical practice and science, since residents study at the clinic with all powerful human resources and the necessary full equipment to provide qualified and high-tech care to patients. The employers said that they themselves participate in the assessment of residents, as they are included in the examination commissions. The HEI systematically conducts feedback with employers. Employers constantly evaluate the skills of resident anesthesiologists and resuscitators and gave a high rating during the interview. Also, they believe that they wanted to see such skills of residency graduates as critical thinking and communication skills as the strongest.

The conclusions of the EEC according to the criteria Out of 11 standards comply: fully – 9, partially 2, do not correspond - 0

Standard 3: completed

Recommendations:

1) Develop and implement a program to determine the validity and reliability of methods for assessing residents (clauses 3.1.4; 3.1.6, basic standards)

Standard 4: RESIDENTS

Evidence of compliance:

4.1 Admission policy and selection

The admission policy is presented in detail on the website of KMU NJSC. The resident counseling service is represented by the admissions office, the dean's office (dean, deputy dean, chief specialist, specialist), employees of the registrar's office, ITD, library, curators, clinical mentors, military department, accounting, head of legal and passport and visa work. The head of the department told about the policy on the admission of residents. Approaches to the admission of residents are based on the requirements of the country and internal regulations, namely, admission to the residency is carried out in accordance with the Order of the MES RK "On approval of Standard rules for admission to educational organizations implementing educational programs of higher and postgraduate education" dated October 31, 2018 No. 600, SCES RK – 2022.

Applications for the residency are accepted from July 3 to July 25. Entrance exams to the residency are held from August 8 to August 16, enrollment – until August 28. Residency classes begin on September 1. Admission of citizens to the residency is carried out on a competitive basis based on the results of entrance exams. Applicants to the residency pass the entrance exam in the specialty. When applying for residency, the applicant's personal achievements, the results of research work, etc., and the Rules for placing a state order, admission to training and training of medical personnel in

residency are also taken into account (Order of the MOH RK No. KR DSM-270/2020 of December 15, 2020)

Admission of students to the residency is carried out on the basis of the Academic Policy of the KMU NJPSC in the section "Admission rules, student progress, certification", which is reviewed annually.

Admission of persons entering the KMU NJPSC for the educational residency program of the specialty "Anesthesiology and intensive care for adults and children" is carried out according to their applications on a competitive basis based on the results of the entrance exam. For the period of the entrance examinations to the residency, examination and appeal commissions for specialties are created.

The number of applications is reviewed regularly, taking into account the needs and the situation on the labor market. The procedure for determining the number of resident doctors accepted is regulated by the State Order of the Ministry of Health of the Republic of Kazakhstan, taking into account the possibilities of clinical, practical training, the maximum permissible load on curators, the availability of educational, methodological and scientific literature, the throughput capacity of clinical bases, as well as the material and technical resources of the University. Enrollment of persons in the residency is carried out based on the results of the entrance exam in the profile and those who have scored at least 50 points out of a possible 100 points for commercial department. Persons who have scored the highest points on the entrance exam are enrolled for training under the state educational order on a competitive basis: for residency – at least 75 points. Assessment of knowledge based on a point-rating system taking into account all forms of activity – scientific, educational, etc. – ensures the validity of the procedure for admission of residents and guarantees the availability of the necessary basic knowledge of applicants.

The duration of mastering the educational residency program in the specialty 7R01102 "Anesthesiology and resuscitation for adults and children" is 3 years. Changes concerning admission to the residency are reflected in the Academic Policy of the HEI, in the admission rules. So, for example, in 2020, in accordance with the circular letter of the Ministry of Health (ex. No. 14-02-11/3875-I dated July 16, 2020), graduates of the internship in 2020 must find a job in medical institutions by July 22 of this year in accordance with the decision of the Republican Commission for the Personal Distribution of Young Specialists dated June 30, 2020. A prerequisite for admission to residency in 2020 and 2021 is the availability of a place of work in medical organizations. Persons working in dispensaries, infectious diseases hospitals, polyclinics, ambulance stations will have a preferential right in the competitive selection.

The website of KMU NJSC presents information materials on admission – a list of documents, programs for admission; Academic policy, a catalog of elective disciplines, academic calendar, schedules. The page is accessible to an external user.

The number of residents is determined based on the possibilities of clinical training, as well as the needs of practical healthcare.

Thus, the experts carried out data validation according to **Standard 4**. In general, all the criteria meet, there are no disadvantages. The experts got acquainted with the documentation on the admission of residents, including the "Academic Policy". Regarding the practice of academic counseling, personal support of residents and the development of not only professional skills, experts interviewed clinical mentors. The organization has a program for the development of residents, which includes residents in advisory bodies, such as the EPC, AC, and the Council of Young Scientists.

4.2 Number of residents

The number of accepted residents is regulated by the State Order of the Ministry of Health of the Republic of Kazakhstan for the training of medical personnel and taking into account the possibilities of clinical, practical training, the maximum permissible load on teaching staff, the provision of educational, methodological and scientific literature, as well as the material and technical resources of the University.

Specialty 7R01102 "Anesthesiology and resuscitation for adults and children" in the KMU NJPSC has been in existence since 2018, the admission of residents was under a grant from the Ministry of Health of the Republic of Kazakhstan. The number of applications received for individual years is indicated in the application on Google drive.

4.3 Support and consultation of residents

During the conversation of the EEC experts with the residents, it was established that safe conditions for the training of residents have been created and provided in the KMU NJPSC. To protect the interests of residents, to assist them in educational, scientific, and non-educational activities, various services are provided for the organization of counseling, psychological, social, and medical support for students. The experts of the EEC confirmed that experienced teachers and professors are involved in the consultation. In addition, before the start of each module, the teacher of the group informs his residents about his work schedule, the time when residents can seek advice on this discipline.

For personal growth and development, sports and creative events in the team there is a sufficient resource base (Internet, WIFI available on the 100% territory of center, library, computer classes, reconstructed and improved territories of the center's buildings). The study rooms are equipped with projectors, a screen, a video wall, and all necessary office equipment.

The implementation of educational residency programs in the specialty 7R01102 "Anesthesiology and intensive care for adults and children" is provided with free access of the resident to information resources and library collections, the availability of methodological manuals and recommendations for all modules, disciplines and all types of academic work.

To develop the intellectual level of residents and expand their knowledge in various scientific fields, residents take an active part in scientific and practical conferences held by the University. Residents are involved in the work of the Council of Young Scientists, which also solves emerging problematic issues.

According to the survey: a variety of teaching methods are used in the process of teaching residents: lectures (18.75%), oral analysis of the topic (59.38%), rewriting thematic information from monographs (6.5%), problem-oriented learning (71.88%), interactive learning (43.75%), execution of abstracts (6.25%), implementation of projects, term papers (37.5%), practical classes on clinical skills in the clinical training center (53.6%), analysis of situational tasks (81.25%), preparation and solution of cases (56.25%), oral survey of students (59.38%), solving tests (46.88%), work in small groups (59.38%), written assignments (50%).

4.4 Representation of residents

During the conversation with the representatives, it was found out that the quality of the implementation of the educational program is ensured by the participation of residents in the discussion of the mission of the EP, access to which is open through posting on the website of the KMU NJSC. Along with supervisors and teachers, residents are included to participate in the consideration of issues related to the educational process and the approval of training materials on residency, the development of an individual work curriculum and elective disciplines. *This fact was confirmed by residents during their interview. According to the survey results, 79.37% of respondents believe that program managers and teachers constantly involve students in the work of advisory bodies (methodological council, academic council, committees of educational programs), 4.76% answered that no, they do not, while 11.11% do not know anything about it, and 4.76% doubt the answer.*

During the visit by the EEC experts, it was confirmed that feedback from residents is being collected at the stage of mastering the taught discipline (at the end of studying the discipline), as well as on issues related to training / work conditions, problem situations.

4.5 Working conditions

Combining training with work (no more than half pay) in areas of activity close to his future specialty, in his free time, is allowed with the consent of the curator, the head of the department and the curator.

In the presence of certificate, residents of the 2nd year of study are allowed to conduct independent medical activities in public and private medical institutions, outside of school hours. During the visit to the clinical base, the EEC experts found that residents have unlimited access to patients, to all medical manipulations, and can work in the IHIS electronic system, to all types of medical equipment and to all departments of clinical bases. Consulting on all issues of the organization of the educational process for the development of compulsory and elective disciplines is carried out by the HETP of the SMPAR department, the head of the EP Vasiliev D.V., SRPE. The staff of the SRPE together with the staff of the department provide information support to all students. Information about residency training is also posted on the official website of the University <https://www.qmu.edu.kz/media/qmudoc/OPResRus.pdf>

88.89% of residents answered that they personally have access to equipment (educational and real) in order to master practical skills in their specialty, 7.94% of residents partially agree with it. There are offices for conducting theoretical classes with residents, there is a separate room for rest, changing clothes, eating, etc. 90.48% of residents are fully satisfied with the conditions and equipment of classrooms, lecture halls, 7.94% of residents partially satisfied, 1.59% of residents completely dissatisfied.

The educational load of residents is planned according to the Law of the Republic of Kazakhstan "On Education". The schedule of classes from 8 am to 5 pm is regulated by the EP, developed on the basis of SCES 2022, sanitary and epidemiological rules and regulations, curricula and recommendations of health and education authorities.

Work in the residency is the main and dominant duty of the resident.

The EP maintains a balance of all types of activities: patient management, work in IHIS, participation in anesthesia, night shifts, participation in clinical and anatomical conferences, etc. A resident's duty schedule is drawn up in a certain unit of the clinical base, according to the discipline. Residents with work experience may have an individual learning trajectory (with rotation by departments), and the choice of elective discipline also affects the learning trajectory.

Conclusions of the EEC according to the criteria. Out of 30 standards comply: fully - 30.
Standard 4: completed

Recommendations for improvement identified during the external visit: none

Standard 5: TEACHERS

Evidence of compliance:

5.1 Recruitment and selection policy

The EEC experts confirmed that, according to the SCES (as amended in 2022), persons assigned to resident doctors to master the necessary theoretical and practical skills are appointed from among HETP and/or practical healthcare workers with an academic degree, the first or highest qualification category, having appropriate training in the field of medical education.

The Department of Emergency Medicine, Anesthesiology and Resuscitation has a sufficient number of teachers for the successful implementation of the residency training program in the specialty 7R01102 "Anesthesiology and resuscitation for adults and children" (out of 17 full-time HETP in the residency, 8 HETP with scientific degrees and the highest qualification category of an anesthesiologist and resuscitator). To work with the resident in the 2022-2023 academic year, 20 clinical mentors with the highest qualification category in the specialty were involved. The experience of clinical and research work of HETP is over 5 years. The main indicators characterizing the specialists involved as teaching staff for residents are the following characteristics: the presence of an academic degree and title, scientific and pedagogical experience and experience in the position, activity in scientific and methodological and research work, etc. The selection of HETP in accordance with the established requirements, the analysis of the quantitative and qualitative composition of the teaching staff, the monitoring and evaluation of pedagogical activity are objects of constant attention from the university management.

The staff of the residency HETP is determined according to the basic provisions of the Order of the Minister of Health of the Republic of Kazakhstan dated June 14, 2004 No. 474 "On approval of the norms for calculating the cost of training of one student, a residency student, a master's student, a doctoral student (PhD) in educational organizations and scientific organizations in the field of healthcare within the country by state educational order".

In order to verify the data of **Standard 5**, external experts obtained the opinion of teachers on the personnel policy, which includes the policy of recruitment and admission of teachers and clinical mentors, stimulation and motivation of practical healthcare professionals. The conversation with the head of the human resources department of KNU NJPSC included such questions as how specialists are attracted and motivated to educational activities and allowed experts to learn about approaches to attracting employees of the clinical base for teaching, about the strategy and tactics of recruiting teachers, information security of the educational program, as well as to identify problems in the management and development of human resources, since most part-timers do not know the teaching methodology.

During the questionnaire survey of teachers it was found that the majority (93.75%) are fully satisfied with the organization of work and workplace in this educational organization, but 6.25% are partially satisfied. In this educational organization, the teachers have the opportunity to engage in research work and publish the results of WR - 90.63% of them strongly agree, 9.38% of them partially agree. Satisfied with the work of HR Service (personnel) - 87.5% are strongly agree, 9.38% are partially agree. Satisfied with the salary - 53.13% strongly agree, 12.5% disagree, 25% more "YES" than "NO", 9.38% more "NO" than "YES".

5.2 Teacher commitment and development

During the conversation of the EEC experts with representatives of management personnel, it was established that the personnel policy of NKMU NJPSC for personnel development consists in planning, developing measures to stimulate and reward achievements in work. The types of incentives and the procedure for their application are determined by the legislation of the Republic of Kazakhstan.

One of the priority directions of the development of the HETP of the residency is to increase the level of pedagogical skills. HETP have the opportunity to undergo various scientific and practical trainings and internships. During the reporting period, advanced training in pedagogy took place in the following cycles: "Development of communication skills of teachers of clinical disciplines at the university", "Standardized patient in medical education", "Effective teacher", "Development of communication skills of students in clinical disciplines", etc. To improve the qualification of HETP in the specialty, the staff of the department were trained in the cycles: "Anesthesia and intensive care in a multidisciplinary medical organization", "Medical Triage system triage", "Selected issues of examination of the quality of medical services", "Current problems of anesthesiology and resuscitation", "Anesthesia and intensive care in pediatrics" and others.

In order to verify the data of standard 5, at a meeting with the head of the personnel department, and during interviews with teachers, experts received an opinion on approaches to the development of teachers' pedagogical competence, motivation to work with residents, mentoring, which includes the organization of cycles of improving pedagogical qualifications (a certificate of completion of a cycle of 60 hours), financial incentives in the form of employee bonuses. However, given the level of EP residency, experts have identified a limited opportunity for international professional internships of teaching staff. *Regarding the support of participation in conferences (international, republican), 62.5% claim that they were paid for travel, travel, registration fees, 9.38% - only travel, expenses were not paid -3.1%, and 15.6% did not contact the management about this, 9.38% did not respond.*

Experts have found that teachers initiate research topics for residents, stimulate the need for additional training and independent work with literature, medical documentation. Confirmation of this fact was received during an interview with residents.

In HEI, there is an opportunity for career growth and development of teacher's competencies - 9.63% of questioned teachers confirmed this, and 9.38% partially agree with this fact. 87.5% have attended professional development courses, with 9.38% - more than 5 years ago, 3.13% do not remember when it was.

The HEI implements social support programs for teachers - 78.1% answered that "yes, there are such programs", 3.1% "I have already used it", 3.3% of respondents answered that there are no such programs, and 15.63% of respondents do not know about it. At the same time, 95.2% of the surveyed residents are satisfied with the activities of mentors, supervisors and scientific supervisors, 4.8% are partially satisfied.

Conclusions of the EEC according to the criteria. Out of 7 standards comply: fully – 6, partially – 1, do not correspond – 0.

Standard 5: completed

Recommendations for improvement identified during the external visit:

1) Increase the number of international clinical internships for residency teachers (Standard 5, paragraph 5.2.4.).

Standard 6: EDUCATIONAL RESOURCES

Evidence of compliance:

6.1 Logistics and equipment

The University has a developed material and technical base for the implementation of professional training of residents in the specialty 7R01102 "Anesthesiology and resuscitation for adults and children". The material and technical base of the university includes: lecture halls, study rooms, educational and research laboratories, a library, information technology facilities, cultural and social facilities, university clinics, clinical bases - leading medical institutions of Karaganda.

Lecture halls are equipped with the necessary means of technical support – stationary multimedia projectors. The total area of the main academic buildings of the university is 29160.6 sq.m.

All clinical bases have classrooms that are equipped for classes, they have the necessary furniture, technical training tools, including personal computers and multimedia projectors.

To practice practical skills, there is a Center for simulation and educational technologies with total area 1300 sq.m., 42 classrooms. The Center is equipped with more than 400 types of simulation equipment, including 57 high-tech simulators. Visiting the Center is possible as part of the independent work of a resident by appointment in a specially designed form. For surgical specialties, there is an extensive amount of simulation equipment, involving the development of basic practical skills, but for residents to practice practical skills, simulation equipment is limited.

The faculty survey showed that 93.75% of respondents strongly agree that the organization has sufficient equipment and resources to conduct resident education in accredited programs, while 6.25% agree partially.

Fully satisfied with the organization of the educational process 87.5%, partially - 12.5%. The 93.75% of teachers are fully satisfied with the organization of work and workplace in KMU NJSC, 6.25% are partially satisfied.

6.2 Clinical bases

A review of the resources of the clinical bases of the KMU NJPSC showed that they correspond to the goals and objectives of educational activities, and employees ensure collegial and ethical relations with medical staff, the management of the clinical base to achieve the final results of resident anesthesiologists and resuscitators. The study of profile disciplines is carried out at these clinical bases. The Medical University clinic has 100 beds, of which 60 are surgical, including 6 beds for children with surgical and urological diseases. The Regional Children's Clinical Hospital has 50 beds of general

surgical profile, 30 beds for children with surgical infection. The Pavlodar Children's Clinical Hospital has 25 beds of surgical profile, 22 beds for purulent surgery, 3 beds for newborn surgery.

A sufficient number of patients, surgical operations, modern equipment, etc. have been provided, which demonstrates accessibility to students, and employees who simultaneously perform the roles of teachers and clinical mentors provide high-quality training in compliance with ethics and deontology. Before starting the relevant discipline of the educational program, the resident receives a syllabus from the teacher and knows what skills he should acquire and develop during the training.

During the visit of clinical bases, where experts conducted a survey of resources, their compliance with the training program for residents of anesthesiologists and resuscitators, accessibility for teachers and residents, to what extent this equipment is modern and meets the needs of students and practical healthcare. Experts have obtained evidence of compliance with Standard 6, as well as validation of the self-assessment report information.

In order to validate the implementation of the data of the self-assessment report and obtain evidence about the quality of the EP residency in the specialty 7R01102 "Anesthesiology and intensive care for adults and children", interviews with residents were conducted. Experts asked questions about satisfaction with training, sufficiency of time for the clinic, working out practical skills, working with patients, working in IHIS and Damrmed with medical documentation, satisfaction with teaching methods and qualifications of teachers, social and moral support, participation in "Magazine Clubs", availability of international databases of professional literature. In general, residents are satisfied with the training, assessment methods, and purposefully enrolled in the KMU NJPSC, as they believe that this educational organization has good resources, image and international connections. Residents showed their commitment to the University, were active in answering questions from external experts, demonstrated their judgment on the organization of training, assessment of their skills, advisory support, opportunities to participate in research, financing. Experts have studied the documents of residents (portfolios, the results of the assessment of residents-checklists, the results of the survey of residents).

The results of the survey of residents showed that 87.3% of respondents are satisfied with the organization of the conditions of rest and nutrition of students (rest rooms) on the territory in between classes, 9.52% are partially satisfied.

6.3 Information technology

To implement the EP in the specialty 7R01102 "Anesthesiology and intensive care for adults and children", there is a wide database of information resources, which is reflected when visiting the library: Cochrane Library, CBS eBooks, EBSCO, BMJ Learning, BMJ Learning, "Doctor's Consultant", "Student's Consultant", "Epigraph", "Akpigress", and there are also corporate subscriptions Web of Science (Clarivate), Scopus Elsevier, Science Direct.

The report on the self-assessment of the educational program contains information on the use of remote platforms: Webex when conducting practical classes in a hybrid format with residents of the visiting residency in the 3rd year.

At the time of the visit, all residents were at the clinical bases, videos of previously conducted distance classes were viewed. When preparing educational and methodical literature, teachers use the educational resources of the library (electronic textbooks, electronic manuals, scanned educational literature), the Internet, as well as the results of their own scientific and research activities.

90,485 residents replied that they fully agree with providing students with methodological and didactic materials, additional literature to prepare for classes. 87.3% of residents note that they are completely satisfied with the system of self-study of students, 12.7% of residents partially agree.

At the clinical bases of KMU NSC there is an opportunity to hold conferences, meetings, classes in a remote format. For this purpose, special Microsoft teams 365, Zoom programs are used, which provide free communication of teachers and residents via the Internet.

6.4 Clinical teams

On a daily basis, resident anesthesiologists and resuscitators participate in joint anesthesia of patients with mentors, patient management, diagnostic and therapeutic measures, etc. Residents also

conduct seminars themselves on topical issues of anesthesiology and resuscitation, where students are both students of all levels, as well as health care and HETP. A resident of the specialty "Anesthesiology and intensive care for adults and children" is a tutor in the simulation center of the university.

Students and residents develop skills of coordination of work with colleagues and other healthcare professionals during examination, patient treatment, and, especially, when providing care to patients.

When asked "Is there sufficient time for hands-on training (patient supervision, clinical rounds, clinical reviews, assisting in surgeries) - 90.48% of residents said they strongly agree, 9.52% said partially agree.

A total of 87.3% of residents believe that the organization of clinical (practical) training is excellent, 11.11% - good, 1.59% - satisfactory. The residents have a sufficient number of patients to supervise or assist in surgeries - 90.48% of residents strongly agree, 4.76% partially agree, 4.76% did not answer this question.

6.5 Medical research and achievements

The scientific research of the staff of the Department of Emergency Medicine, Anesthesiology and Resuscitation is the basis of the scientific work of the residents. During the conversation with the residents, it was found out that they take an active part in the implementation of the scientific work of the department and clinical bases. *74.6% of residents confirmed that they are currently engaged in scientific work under the guidance of their teacher or mentor, 11.1% are not engaged; 11.1% have started planning research; 1.6% are in search of a research topic; 1.6% of residents do not want to engage in research. However, 41.3% have published printed works (articles, abstracts, reviews) during their studies at the university, 39.7% have more than one publication, 3.2% - none; 11.1% - plans to publish in the near future.*

Interviews with teachers showed that there are no problems in the management of education, depending on the specific base (admission of residents to the equipment, a sufficient number of thematic patients, surgical manipulations, etc., time to maintain medical records, independent work).

6.6 Expertise in the field of education

The examination of the quality of the implemented educational program for residency at the university is a systematic process and is carried out by the following structures: ADD (approval of the EP), Dean's Office of Internship and Residency (implementation of the EP), Educational Program Committee (EPC) (planning, development and evaluation of the EP), Teaching and Guiding Department (monitoring of the EP), Department of Quality Management System. The EPC includes teachers, representatives of professional associations, employers, students. The Accreditation and Rating Department monitored various aspects of educational activities in order to obtain independent information aimed at improving the quality of the organization of the educational process. In the course of each study, recommendations were formed for making changes in order to improve the organization of the educational process at the departments and modules of the university.

The examination is carried out in the form of an analysis of the needs for specialists, an analysis of the methods of teaching residents, and the results allow us to draw conclusions about the quality of innovative changes in postgraduate education. *According to the survey results, 95.24% of respondents are completely satisfied with the organization of teaching, 4.76% of respondents are partially satisfied.*

6.7 Training in other institutions

The opportunity for residents to study in other medical organizations is provided by the University's concluded agreements with the Health Departments of 4 regions of the Republic of Kazakhstan and 52 agreements/ memoranda with foreign universities and research centers of 83 countries of the world. The possibility of academic freedom is determined by the fact that the EP is developed on the basis of the National Qualifications Framework corresponding to the qualifications framework for the European Higher Education Area.

Experts have found that to date there has not been organized on-site training within the framework of academic mobility or exchange of students in the specialty 7R01102 "Anesthesiology and resuscitation for adults and children" with partner universities of KMU NJPSC.

Conclusions of the EEC according to the criteria. Out of 21 standards comply: fully – 18, partially -3, do not correspond - 0.

Standard 6: completed

Recommendations for improvement identified during the external visit:

- 1) Retrofit and modernize the material and technical equipment of the Simulation and Educational Technology Center in order to meet the needs of the residency educational program in the development of appropriate practical skills in resuscitation measures (6.1.2)
- 2) To develop a mechanism for attracting residents to clinical and scientific research (p.6.5.3)

Standard 7: EVALUATION OF THE EDUCATIONAL PROGRAM

Evidence of compliance:

7.1 Monitoring and evaluation mechanisms

After analyzing the educational program of the residency in the specialty 7R01102 "Anesthesiology and resuscitation for adults and children", the experts of the EEC found that Monitoring and evaluation of EP is carried out at all levels, a multi-level approach is used, including profiling/graduating and related departments, profile EPC, DAR, Academic Council, Senate, Student Government, Center for Admission and professional orientation of students (general monitoring of the quality of educational programs through a survey of stakeholders (employers, professional associations and students).

Created by a team of authors of the EP in the specialty 7R01102 "Anesthesiology and resuscitation for adults and children" was discussed at the level of the department staff (discussion in the working group, at a meeting of the department, in the EPC, the Academic Committee and approved by the order of the Vice-Rector of the academic block, the educational program was developed in 2018 and annually revised. Corrected with the participation of external reviewers (link https://drive.google.com/drive/folders/1fN2AjXp2PidFazaKdDXGPT-BM835CmLw?usp=share_link).

In accordance with the Law of the Republic of Kazakhstan dated July 27, 2007 No. 319-III "On Education", "Rules of competitive replacement of vacant positions of teaching personnel and researchers of KMU NJPSC, the university has a quality control system of educational and methodological documentation, including the content of educational programs.

In order to monitor the implementation of the EP and as problems are identified, including those related to resource provision, all necessary documents are approved and updated at the University: the Regulation on Academic Policy (approved by the Senate on August 27, 2021), the Regulation on the management of the educational program (September 9, 20, Protocol No. 14, amendments dated January 11, 21 to Order No. 1)

7.2 Feedback from teachers and residents

Teachers and residents have the opportunity to participate in the evaluation and subsequent improvement of the educational program on a regular basis through various [feedback channels](https://kaznmu.edu.kz/rus/wp-content/uploads/2022/02/sop-poryadok-i-formy-provedeniya-obratnoj-svyazi.pdf)<https://kaznmu.edu.kz/rus/wp-content/uploads/2022/02/sop-poryadok-i-formy-provedeniya-obratnoj-svyazi.pdf>. Feedback on the EP for specialty "Anesthesiology and intensive care for adults and children" at the department is carried out 1 time a year, the head of the department and the teacher responsible for the residency are responsible for collecting and processing the results of the discussion.

The QMS Department monitors the satisfaction of internal and external consumers of the university. The feedback results are analyzed, discussed at the meetings of departments, EPC, AC, and published on the university's website (<https://qmu.edu.kz/r>).

The survey is conducted according to the following types: "Teacher through the eyes of students", "Satisfaction of students with the conditions and learning outcomes", "Satisfaction with the infrastructure", "Graduate satisfaction with the quality of training", "Freshman questionnaire". *The*

survey is conducted online via Google, as well as on paper. The coverage of respondents according to various questionnaires ranged from 75% to 95%.

According to the results of the survey "Teacher through the eyes of students", a report and a certificate are compiled for each teacher with an assessment of students. The materials of the survey of all interested parties (students, employers, teachers) are discussed at the department, an analytical report on the results of the survey is considered. The report data are analyzed, compared with real facts, cause-and-effect relationships are clarified and then a decision is made to make changes to the organization of the educational process, EP.

For the purpose of feedback, an annual survey of employers is conducted. Thus, an assessment of the degree of satisfaction of employers with University graduates is carried out to identify the compliance of the educational program with the real requirements of the labor market, opportunities for its improvement, as well as the degree of compliance of graduates' competencies with positions in the workplace.

7.3 Results of residents and graduates

An important role in the evaluation of the educational program is played by the results of the final certification of residents conducted at the testing stage by the National Center for Independent Examination, as well as the results of certification exams conducted by the Committee for Control of Medical and Pharmaceutical Activities of the Ministry of Health and Social Development of the Republic of Kazakhstan.

In the specialty 7R01102 "Anesthesiology and intensive care for adults and children", the final state certification is planned to be carried out in 2 stages: determination of the level of theoretical training in the disciplines in the form of testing; certification of practical skills at the Center for Simulation Educational Technologies (CSET).

The QMS Department monitors the satisfaction of internal and external consumers of the university. In 2022, the degree of satisfaction of residents with educational <https://drive.google.com/drive/folders/1-1XtCDI6Gpoqfz1XbxaJhaLnQNb8tXBW> programs was 90%. A high level of satisfaction was noted in relation to clinical bases, technical equipment, qualifications and competence of HETP. In total, 76 residents graduated from the specialty 7R01102 "Anesthesiology and intensive care for adults and children".

7.4 Stakeholder engagement

Participation of a wide range of stakeholders in the evaluation and improvement of educational programs in the KMU NJSC is provided by the authorized bodies in the field of education and health (MOH RK), representatives of the public, professional organizations, as well as persons and structures responsible for postgraduate education:

1. MOH RK – independent assessment of residents' knowledge.
2. Employers.
3. Representatives of the Committee for the Control of Medical and Pharmaceutical Services and representatives of practical healthcare.

All interested parties (HETP, residents, employers) are involved in the evaluation process of the program through representation in the relevant structures. The work of all structures ensuring the implementation and evaluation of the educational program is regulated by the Charter of the university, the strategic plan for the development of the university, the annual plans and reports of the university, as well as the relevant QMS procedures. The evaluation results are heard at meetings of the Clinical Council, Schools, MS and US, published in the university newspaper and on the university website.

Interviews with employers were conducted offline and included such questions as: knowledge of the university's mission, participation in the development of the mission and proposals to the strategic plan, participation in the work of advisory bodies, satisfaction with the basic knowledge and skills of residents, participation in the training of residents through mentoring, providing the department and residents with the necessary resources for practical training and the formation of clinical thinking, about the problems of interaction with departments and universities in general, 100% employment of

residency graduates, etc. Employers in anesthesiology and resuscitation noted the high level of knowledge and practical skills of graduates of the residency.

7.5 Procedure for approving educational programs

The educational program in the specialty 7R01102 "Anesthesiology and resuscitation for adults and children" was developed in accordance with the SCES and the Standard curriculum for this specialty.

The University has developed mechanisms for approving educational programs, providing for the evaluation of programs at the stages of planning, implementation, analysis of results and implementation of changes, which allows monitoring the process of implementing the EP and the progress of residents, and ensures the identification and timely solution of emerging problems.

An examination of the EP is carried out, for compliance with the SCES, the ESC is approved according to the proposals of stakeholders and taking into account pre- and post-requirements, evaluates the choice of methods for evaluating the results of training of residents. A systematic study and comprehensive assessment of the EP is carried out in order to improve and guarantee quality (determining the value of the program, achieving the goal, implementing tasks, the degree of compliance with the needs of society, the requirements of employers, the effectiveness of teaching methods), as well as an assessment of the educational and methodological support and support of the educational process, an assessment of the quality of the EP. For this purpose, an external assessment of the EP is carried out by a competent representative of practical healthcare.

The survey of teachers showed that 84.38% confirmed that they personally participate in the development of methodological materials for the residency program, 12.5% of residents do not participate, 3.13% of residents replied that they participated in the development of electives.

Conclusions of the EEC according to the criteria. Out of 15 standards comply: fully – 15.

Standard 7: completed

Recommendations for improvement identified during the external visit: none

Standard 8: MANAGEMENT AND ADMINISTRATION

Evidence of compliance:

8.1 Management

The guarantee of the implementation of the specialty 7R01102 "Anesthesiology and resuscitation for adults and children" is its strict compliance with the requirements of the regulatory rules regarding the admission of residents (selection criteria and number), the learning process, assessment of knowledge and skills, established learning outcomes, program management, which are regulated in the Republic of Kazakhstan by the regulatory legal acts of the MH RK and the MES RK.

Students who have mastered the residency program in the specialty 7R01102 "Anesthesiology and resuscitation for adults and children" and have successfully passed the state certification will be issued a state-issued document on the qualification of an anesthesiologist for resuscitation for adults, children.

All activities for the implementation of the EP are carried out under the direct supervision of educational departments, members of the Educational programs Committee, deanery, independent experts.

Transparency of EP management is carried out through discussion of educational and methodological documentation on the residency program at meetings of departments/modules of the EPC, AC of the KMU NJPSC and after receiving their positive conclusion is approved by the Vice-rector for Academic Activities. Syllabuses, test tasks will be placed in Platonus AIDS

To quickly bring useful information to residents and teachers, there is an electronic moving news line in the center of the University campus, information for which is updated daily. In KMU NJPSC rector's blog <https://www.qmu.edu.kz/ru/hall/ask> a meeting of the rector with students is held once every two months.

According to the survey, 96.88% of teachers fully agree that ethics and subordination in relations between colleagues, teachers and management are observed at the university, the remaining 3.13% completely disagree.

90.63% of respondents are completely satisfied with the organization of work and workplace, 9.38% of respondents are partially satisfied.

8.2 Academic leadership

The management of the educational process, including at the postgraduate level, is carried out according to the [organizational structure of the KMU NJSC](#). The executive body of the University is its Rector, Chairman of the Management Board. The Rector, the Chairman of the University's Management Board is personally responsible for financial and economic activities, the safety of the University's property, for the organization of anti-corruption, establishes the competence of the provost, vice-rectors and other senior officials of the University, solves all issues of the University's activities in accordance with its competence, determined by the legislation of the Republic of Kazakhstan and the Charter of the KMU NJPSC. Residency issues are supervised by the Vice-rector for Academic Activities in terms of the educational process and the provost in terms of clinical activities.

The *School of Residency and Vocational Education* [will directly manage the residency programs and coordinate the activities of residents from the moment of the residency's existence](#). The activities are managed by the dean appointed to the position by the order of the rector

The general management of the dean's office is carried out by an elected representative body – the Faculty Council, which organizes its work under the leadership of the Dean of internship and residency. The composition of the Council is approved by the order of the Vice-rector. The Council of the Dean's Office consists of the following positions: Dean of the Faculty of Internship and Residency (Chairman of the Council); heads of departments, professors and associate professors of departments; representatives of interested parties (interns, residents, employers). The Dean's Office is responsible for making the following decisions: development and approval of the mission of programs, rules for organizing the educational process in the residency, recommendations for recruiting residents who train residents. The Dean's Office monitors residents, supports relations with the practical healthcare sector and residency graduates, and interacts with other structural units of the University involved in the implementation and support of residency programs (ADD (EPPCD and AMA), ITD). In order to effectively manage the educational process, the EPC is created.

84.38% of teachers believe that the management of the KMU NJPSC listens to the opinion of the HETP regarding issues on the educational process, research, clinical work, 12.5% of teachers partially agree, 3.13% of teachers did not respond the question.

8.3 Training budget and resource allocation

The university budget is formed from several sources: the republican budget (the state order for the training of university and postgraduate education, advanced training of medical workers, the development of scientific research, transfers); the local budget; the provision of paid educational and other services.

The financing of the residency program depends on the formation of an annual state order. Every year, the Government of the Republic of Kazakhstan approves the state educational order for the training of specialists with higher and postgraduate education, according to which the financing of bachelor's, master's, doctoral and residency programs is determined by types of educational institutions.

8.4 Administration and management

The University annually makes changes and additions to the organizational structure. The staffing table of departments/modules providing educational residency programs is approved annually taking into account changes in the number of residents. According to Article 52 of the Law of the Republic of Kazakhstan "On Education" dated July 27, 2007 No. 319-III, the total number of teaching staff is formed based on the average ratio of residents and teachers - 3:1.

KMU NJSC is the first medical university of the Republic of Kazakhstan, which successfully passed the certification of the quality management system in 2005 for compliance of educational, scientific and clinical activities with the requirements of the International Standard ISO 9001 series by the certification body NQA – UK (UK), NQA – Russia. In 2015, the university passed the certification in the certification body SGS (Switzerland). In 2016, the university was accredited in the field of healthcare for compliance with accreditation standards for medical organizations providing inpatient care with the assignment of the first category.

The system of internal evaluation, monitoring of the teacher's work and the achievement of intermediate and final results of educational programs is carried out through the certification of HETP in all types of activities.

8.5 Requirements and regulations

The University determines and approves the educational program in the specialty 7R01102 "Anesthesiology and resuscitation for adults and children" according to the State Standard of the Ministry of Health of the Republic of Kazakhstan No. 647 dated July 20, 2022. The approval of the program takes place in close cooperation with all interested parties. The structure and content of the WC correspond to the SCES in the specialty 7R01102 "Anesthesiology and resuscitation for adults and children", the discipline programs are developed at the proper scientific and methodological level. The sequence of studying the residency disciplines is built using a system of pre- and post-prerequisites.

Conclusions of the EEC according to the criteria. Out of 15 standards comply (including 8 basic, 7 improvement standards): fully – 15.

Standard 8: completed

There are no recommendations for improvement identified during the external visit.

Standard 9: CONTINUOUS IMPROVEMENT

Evidence of compliance:

KMU NJSC always strives to respond in a timely manner to changing internal and external conditions. In order to continuously improve the educational process, in accordance with the best practice of world educational management, taking into account the needs of practical healthcare of the Republic of Kazakhstan, which is under reform, regularly initiates a review and updating of processes.

The policy of selection of residents, methods of selection and admission of residents are adapted annually to changing expectations and circumstances, human resource needs, changes in basic medical education and curriculum requirements.

The regulations on mentoring are updated annually in accordance with the changing needs in postgraduate education. A convincing example of the process of continuous improvement of approaches to the implementation of educational residency programs is the active participation of stakeholders (primarily representatives of employers) in the formation of an educational strategy that reflects the social responsibility of the Institute for the development of advanced innovative technologies in practical medicine and science, the use of information and communication technologies, as well as the strengthening of public health.

Development of organizational structure, control and management to overcome changing circumstances and needs of postgraduate education, and over time gathering the interests of various stakeholder groups.

One of the significant changes aimed at improving work with graduates of KMU NNJPSC, based on the Department of Distribution and Employment of graduates, a Graduate Career Center was created.

Conclusions of the EEC according to the criteria. Out of 4 standards comply: fully – 4.

Standard 9: completed

Recommendations for improvement identified during the external visit: none

Conclusion: When conducting an external evaluation of the educational program, it was found that out of **147 standards** (including basic standards – 91 and improvement standards – 56), 140 accreditation standards, including 88 basic standards and 52 improvement standards, demonstrate full compliance. 3 basic standards and 4 improvement standards have been partially implemented. Non-compliance with the standards has not been established. The implementation of improvement standards testifies to the compliance of the educational organization with the international consensus in such areas as education, clinic and science.

5. Recommendations for improving the educational program 7R01102 "Anesthesiology and resuscitation for adults and children"

1. Include issues of jurisprudence and forensic medicine in the thematic plans of the disciplines of the educational program (2.3.1)
2. Develop and implement a program to determine the validity and reliability of resident assessment methods (3.1.4; 3.1.5)
3. Increase the number of international clinical internships for residency teachers (5.2.4)
4. Retrofit and modernize the material and technical equipment of the Simulation and Educational Technology Center in order to meet the needs of the residency educational program in the development of appropriate practical skills in resuscitation measures (6.1.2)
5. Develop a mechanism for attracting residents to clinical and scientific research (6.5.3)

6. Recommendation to the ECAQA Accreditation Council

The EEC members came to the unanimous opinion to recommend the Accreditation Council to accredit the **7R01102 "Anesthesiology and resuscitation for adults and children"**, educational program of **Karaganda Medical University NJSC** complying with the Standards for Accreditation of Residency Educational Programs of Medical Education Organization for the period of 5 years.

6. Рекомендация Аккредитационному совету ЕЦА

Члены ВЭК пришли к единогласному мнению рекомендовать Аккредитационному совету аккредитовать образовательную программу 7R01102 «Анестезиология и реаниматология взрослая, детская» НАО «Медицинский университет Караганды», соответствующую Стандартам аккредитации образовательных программ резидентуры медицинских организации образования на период 5 лет.

Председатель Внешней экспертной комиссии
КУДАБАЕВА ХАТИМЯ ИЛЬЯСОВНА

Зарубежный эксперт
РЫЖКИН СЕРГЕЙ АЛЕКСАНДРОВИЧ

Зарубежный эксперт
АФРИКЯН ШУШАНИК ГЕВОРКОВНА

Национальный академический эксперт
УРАЗОВА САЛТАНАТ НУРГОЖАЕВНА

Национальный академический эксперт
ШАБДАРБАЕВА ДАРИЯ МУРАТОВНА

Национальный академический эксперт
РАМАЗАНОВА РАЙГУЛЬ МУХАНБЕТОВНА

Национальный академический эксперт
ЖУМАЛИНА АКМАРАЛ КАНАШЕВНА

Национальный академический эксперт
ТУЛЕУТАЕВА РАЙХАН ЕСЕНЖАНОВНА

Национальный академический эксперт
БАЙГОЖИНА ЗАУРЕ АЛПАНОВНА

Национальный академический эксперт
РАМАЗАНОВА ШОЛПАН ХАМЗАЕВНА

Национальный академический эксперт
ЕРАЛИЕВА БИБИХАН АБДАЛИЕВНА

Национальный академический эксперт
ИСПОСУНОВА ГУЛЬНАРА АХМЕТКАЗЫЕВНА

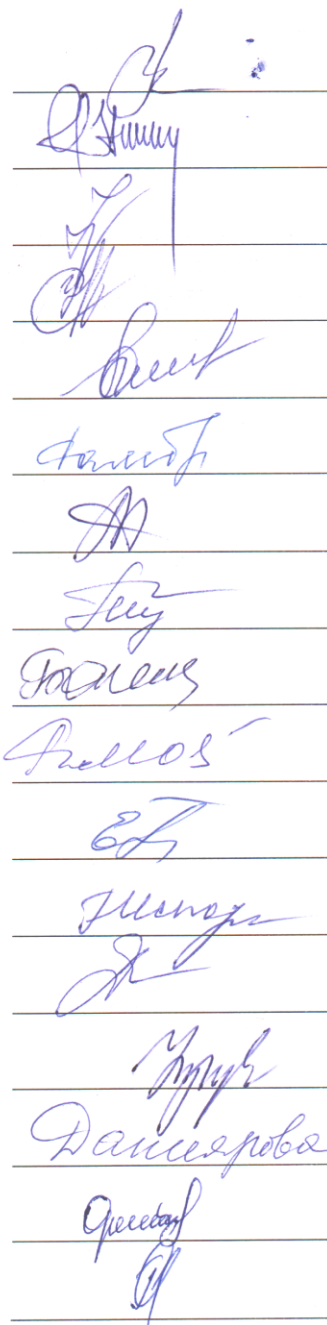
Национальный академический эксперт
ДОШАКАНОВА АСЕЛЬ БАЙДАУЛЕТОВНА

Национальный академический эксперт
ДОСАНОВА АСЕМ КАЛЕЛОВНА

Эксперт- представитель практического здравоохранения
ДАНИЯРОВА БАЯН ЛАШИНОВНА

Эксперт – представитель докторантов
ОРАЗБАЙ АҚНҰР ДӘУРЕНҚЫЗЫ

Эксперт – представитель резидентов
ҚҰРАҚ АЙДАНА ЖАНАЙДАРОВНА



Quality profile and criteria for external evaluation of the educational program (generalization)

Standard	Assessment criteria	Number of standards	BS*/IS	Assessment		
				Correspond in full	Correspond partly	Doesn't correspond
1.	MISSION AND END RESULTS	17	10/7	10/7		
2.	EDUCATIONAL PROGRAM	30	22/8	21/8	1/	
3.	ASSESSMENT OF RESIDENTS	11	7/4	5/4	2/	
4.	RESIDENTS	30	18/12	18/2		
5.	ACADEMIC STAFF/TEACHERS	7	5/2	5/1	/1	
6.	EDUCATIONAL RESOURCES	21	10/11	10/8	/3	
7.	EVALUATION OF THE EDUCATIONAL PROGRAM	15	10/5	10/5		
8.	MANAGEMENT AND ADMINISTRATION	15	8/7	8/7		
9.	CONTINUOUS IMPROVEMENT	1	1/0	1/0		
		147	91/56	88/52	³ / ₄	
				140	7	

The list of documents studied by the members of the EEC as part of the external assessment of the residency educational program

No.	Name of documents	Quantity
1.	Certificate of International Accreditation of Educational Programs 2016.	3
2.	State Standard SCES 2022 (Order No. 63 dated July 04, 2022)	1
3.	Law of the Republic of Kazakhstan No. 319-III “On Education” dated July 27, 2007	1
4.	Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No. 600 “Standard Rules of Enrollment in Educational Organizations Implementing Educational Programs of Higher Education”	1
5.	Order of the Minister of Health Care of the Republic of Kazakhstan dated December 15, 2020 No. KR DSM-270/2020 “On Approval of the Rules for Placement of the State Order, Enrollment for Education and Training of Medical Personnel in Residency”	1
6.	Order of the Minister of Health Care of the Republic of Kazakhstan dated July 4, 2022 No. KR DSM-63 “On Approval of State Compulsory Standards by Levels of Education in the Field of Health Care”	1
7.	Order of the Minister of Education and Science of the Republic of Kazakhstan dated April 20, 2011 No. 152 “On Approval of the Rules for the Organization of the Educational Process on Credit Technology of Education”	1
8.	Order of the Minister of Health Care of the Republic of Kazakhstan dated December 11, 2020 No. KR DSM-249/2020 “On Approval of the Rules for Evaluation of Knowledge and Skills of Students, Evaluation of Professional Preparedness of Graduates of Educational Programs in the Field of Health Care and Specialists in the Field of Health Care”	1
9.	“Regulations on the Residency of KMU NJSC”, approved by the decision of the Board dated August 23, 2022, Resolution No. 18	1
10.	Order No. 182 dated September 05, 2023 "On Residency"	1
11.	Academic Policy of KMU NJSC (approved by the decision of the Senate dated August 27, 2021, Resolution No. 1)	1
12.	KMU NJSC Code of Business Ethics	1
13.	Articles of Association of the KMU NJSC	1
14.	Register of educational programs of the UHEMS of the MES RK	1
15.	7R01106 “Pediatric Surgery” educational program	1
16.	List of QMS documents in force in KMU NJSC	1
17.	Composition of collegial advisory bodies of KMU NJSC : Senate of KMU NJSC , Council of SRPD	1
18.	TM in 7R01106 “Pediatric Surgery” specialty	12
19.	Profiles of social pages of KMU NJSC , Department of Surgical Diseases	3
20.	Catalog of elective disciplines on 7R01106 “Pediatric Surgery” specialty	1
21.	“Session”, “Platonus” automated systems	2
22.	Documents confirming participation of residents in scientific and practical conferences of national and international importance	4
23.	Acts of implementation in the specialty of the accredited educational program	2
24.	Personalized resident work plan	9
25.	Reprints of resident articles	1
26.	Certificates of additional resident training	1

27.	Documents confirming the participation of residents in the sanitary and educational work of medical organizations	4
28.	Minutes of the meeting of the academic committee of the residency school	4
29.	Results of the employer's survey	2
30.	Results of the survey "Evaluation of Satisfaction with the Educational Process among Students"	1
31.	Certificates of HETP on professional development in the field of interpersonal interaction in medicine and professional behavior	2
32.	Algorithm for critical appraisal of clinical protocols for diagnosis and treatment AGREE II	1
33.	Order No. 1 "On Approval of the List of SUE Members by Residency Specialties"	1
34.	Order of the Minister of Health Care of the Republic of Kazakhstan dated December 21, 2020, No. KR DSM-304/2020, "On Approval of Provisions on Clinical Base, Clinic of Health Care Education Organization, University Hospital, Residency Base, Integrated Academic Medical Center and Requirements for them"; SCES, Order of the MH RK dated July 04, 2022, No. KR DSM-63	1
35.	Contracts with clinical facilities https://disk.yandex.ru/d/Wx2LxPDGo4UA3w	7
36.	Certificate of state registration of rights to the copyright object No. 99 dated January 22, 2015 "Estimated Forms of Independent Work of a Student in a Medical University (scientific work)", authors Dosmagambetova R.S., Laryushina E.M., Turgunova L.G. et al.	2
37.	Employer survey results for 2022	1
38.	Evaluation sheet "night / day / daily duty in a surgical hospital"	1
39.	Evaluation sheet "medical record keeping / medical record" in a surgical inpatient unit	1
40.	Evaluation sheet "360° - resident evaluation" for all areas of training	1
41.	Evaluation sheet of the residency portfolio	1
42.	Brief description of information resources available to the units and residents of the accredited educational program (to standard 6 "educational resources", p.6.3).	1
43.	Appendix. Table 10. International cooperation (to the standard "educational resources", p.6.7)	1
44.	Table 11. Information about employment of graduates of the educational program (to standard 7 "evaluation of the educational program")	1
45.	"Regulations on inclusive education in KMU NJSC " in 2020 dated December 09, 2020. Resolution No. 26	1
46.	"Policy for student enrollment at KMU NJSC " for the 2019-2020 academic year (approved by resolution of the KMU NJSC Senate, October 22, 2019, app.1), 2021-2022 academic year (approved by resolution of the KMU NJSC Senate on May 21, 2021, app.10), and 2022-2023 academic year (approved by resolution of the Board of Directors on May 27, 2022, app.37)	1
47.	"Policy of applicants' enrollment in the educational programs of postgraduate education" KMU NJSC , approved by the decision of the Senate on October 22, 2019, app.1	1
48.	Composition of the Board of the School of Residency and Professional Development	1
49.	"Regulations on sending on a trip of KMU NJSC students", approved on June 10, 2019 amended on September 02, 2022, version 1,	1

	https://disk.yandex.ru/d/4cuwsLZDQXVvTA	
50.	KMU NJSC Student Support Services Regulations (KMU NJSC Board Regulation 19-2, version 1 dated July 08, 2019, as amended on October 23, 2020, app. 20)	1
51.	Regulations on the scientific society of young scientists and students of the University	1
52.	Order No. 182PO dated September 05, 2022 “On Field Residency”	1
53.	Certificates from the resident's work place	10
54.	Diplomas, certificates, diplomas of HETP	29
55.	Personalized teacher's work plan	1
56.	Job description of the Head of the educational program	1
57.	Position description of the professor	1
58.	Extract from the minutes of the Senate meeting of KMU NJSC 37 dated April 28, 2022. “On the distribution of teaching load of HETP”	1
59.	Staff schedule of the Department of Surgical Diseases of the KMU NJSC	3
60.	Teaching load on residency in the 7R01106 “Pediatric Surgery” specialty	3
61.	Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No. 606: “On Approval of the Average Ratio of the Number of Students to Teachers for Calculation of the Total Number of HETP of Higher and (or) Postgraduate Education Organizations, Except for Military, Special Educational Institutions, Organizations of Education in the Field of Culture”	1
62.	Faculty work time standards for the year 2022 - 2023	2
63.	Safety record	3
64.	List of literature on 7R01106 “Pediatric Surgery” specialty in Kazakh and English language	2
65.	“Pediatric Surgery” WC	3
66.	Certificates confirming residents' participation in scientific activities	12
67.	Review of the residency educational program	2
68.	Resident enrollment document for the 2019-2022,2020-2021,2021-2022 and 2022-2023 academic years	3
69.	Rules for competitive filling of vacant positions at KMU NJSC	1
70.	Annual report on the activities of the KMU NJSC University	1
71.	Regulations on the Board of the KMU NJSC as amended on May 26, 2020	1